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VOLUME II

REMOTE SENSING APPLICATIONS TO HYDROLOGIC MODELING IN THE
SOUTHERN SIERRA NEVADA AND PORTIONS OF THE SAN JOAQUIN VALLEY

(E78-10127) REMOTE SENSING APPLICATIONS TO
HYDROLOGIC MODELING IN THE SOUTHERN SIERRA
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Landsat Ground-Truth Radiometer Measurements

Measurements taken with an Exotech Model 100-A Landsat Ground-Truth Radiometer, for various orientations, are listed. Arrangement is chronological, and measurements generally coincide with Landsat overpasses.

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 12 February 1977

Time: 0731 (Pacific Standard)

Site: Onion Valley, on Road
Measurement by: Dozier et al

Altitude: 2788 m (9150 ft)

Latitude: +36,46,28

Longitude: -118,20,13

Record No. 0001

2 Pi Steradian Field of View (Diffuser)
(Horizontal Surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.19	1.90E-01	1.64E+01	1.68E-01
5	580-706	5	0.30	3.00E-01	2.56E+01	2.03E-01
6	687-819	5	0.34	3.40E-01	2.62E+01	1.98E-01
7	767-974	5	0.42	4.20E-01	3.04E+01	1.47E-01

Record No. 0002

Time: 0747 (Pacific Standard)

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.58	2.90E+00	1.16E+02	1.18E+00
5	580-706	1	0.66	3.30E+00	1.32E+02	1.05E+00

Record No. 0003

Time: 0747 (Pacific Standard)

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	5	0.31	3.10E-01	1.26E+01	9.51E-02
7	767-974	1	0.22	1.10E+00	4.47E+01	2.16E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 12 February 1977 Time: 1018 (Pacific Standard)

Site: Kearsarge Pass Trail above Onion Valley
Measurement by: Dozier, Marks

Altitude: 3023 m (9920 ft) Latitude: +36,46,15
Longitude: -118,20,54

Record No. 0004

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.79	3.95E+00	1.58E+02	1.61E+00
5	580-706	1	0.92	4.60E+00	1.84E+02	1.46E+00

Record No. 0005

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	5	0.35	3.50E-01	1.42E+01	1.07E-01
7	767-974	1	0.26	1.30E+00	5.28E+01	2.55E-01

Record No. 0006

Time: 1019 (Pacific Standard)

15° Field of View (Plane Glass)
(Overhead Sky Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.55	1.10E-01	4.40E+00	4.49E-02
5	580-706	25	0.39	7.80E-02	3.14E+00	2.49E-02
6	687-819	125	0.88	3.52E-02	1.43E+00	1.08E-02
7	767-974	125	0.86	3.44E-02	1.40E+00	6.77E-03

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 12 February 1977

Time: 1020 (Pacific Standard)

Site: Kearsarge Pass Trail above Onion Valley
Measurement by: Dozier, Marks

Altitude: 3023 m (9920 ft)

Latitude: +36,46,15
Longitude: -118,20,54

Record No. 0007

2 Pi Steradian Field of View (Diffuser)
(Horizontal Surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.04E+02	1.06E+00
5	580-706	1	0.28	1.40E+00	1.20E+02	9.49E-01
6	687-819	1	0.24	1.20E+00	9.24E+01	7.00E-01
7	767-974	1	0.30	1.50E+00	1.09E+02	5.25E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 12 February 1977

Time: 1336 (Pacific Standard)

Site: Kearsarge Pass Trail above Heart Lake
Measurement by: Dozier, Marks

Altitude: 3337 m (10950 ft)

Latitude: +36,46,17
Longitude: -118,21,50

Record No. 0008

2 Pi Steradian Field of View (Diffuser)
(Horizontal Surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.64E+01	8.82E-01
5	580-706	1	0.22	1.10E+00	9.39E+01	7.46E-01
6	687-819	1	0.19	9.50E-01	7.31E+01	5.54E-01
7	767-974	1	0.26	1.30E+00	9.41E+01	4.55E-01

Record No. 0009

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.85	4.25E+00	1.70E+02	1.73E+00
5	580-706	1	0.90	4.50E+00	1.80E+02	1.43E+00

Record No. 0010

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	5	0.34	3.40E-01	1.38E+01	1.04E-01
7	767-974	1	0.25	1.25E+00	5.08E+01	2.45E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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Date: 12 February 1977

Time: 1617 (Pacific Standard)

Site: Kearsarge Pass Summit
Measurement by: Dozier, Marks

Altitude: 3603 m (11823 ft)

Latitude: +36,46,22
Longitude: -118,22,32

Record No. 0011

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.62	3.10E+00	1.24E+02	1.27E+00
5	580-706	1	0.72	3.60E+00	1.44E+02	1.14E+00

Record No. 0012

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	5	0.31	3.10E-01	1.26E+01	9.51E-02
7	767-974	1	0.23	1.15E+00	4.67E+01	2.26E-01

Record No. 0013

Time: 1628 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.28	1.40E+00	1.21E+02	1.23E+00
5	580-706	1	0.37	1.85E+00	1.58E+02	1.25E+00
6	687-819	1	0.38	1.90E+00	1.46E+02	1.11E+00
7	767-974	1	0.55	2.75E+00	1.99E+02	9.62E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 12 February 1977

Time: 1630 (Pacific Standard)

Site: Kearsarge Pass Summit
Measurement by: Dozier, Marks

Altitude: 3603 m (11823 ft)

Latitude: +36,46,22
Longitude: -118,22,32

Record No. 0014

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.38	7.60E-02	6.57E+00	6.71E-02
5	580-706	25	0.30	6.00E-02	5.13E+00	4.07E-02
6	687-819	25	0.22	4.40E-02	3.39E+00	2.57E-02
7	767-974	25	0.25	5.00E-02	3.63E+00	1.75E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 February 1977

Time: 0938 (Pacific Standard)

Site: Upper End of Upper Kearsarge Lake
Measurement by: Dozier, Marks

Altitude: 3337 m (10950 ft)

Latitude: +36,46,08

Longitude: -118,23,00

Record No. 0015

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.40	2.00E+00	1.73E+02	1.76E+00
5	580-706	1	0.49	2.45E+00	2.09E+02	1.66E+00
6	687-819	1	0.44	2.20E+00	1.69E+02	1.28E+00
7	767-974	1	0.61	3.05E+00	2.21E+02	1.07E+00

Record No. 0016

Time: 0940 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.93	1.86E-01	1.61E+01	1.64E-01
5	580-706	5	0.20	2.00E-01	1.71E+01	1.36E-01
6	687-819	25	0.88	1.76E-01	1.36E+01	1.03E-01
7	767-974	5	0.20	2.00E-01	1.45E+01	7.00E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 February 1977

Time: 0942 (Pacific Standard)

Site: Upper End of Upper Kearsarge Lake
Measurement by: Dozier, Marks

Altitude: 3337 m (10950 ft)

Latitude: +36,46,08
Longitude: -118,23,00

Record No. 0017

2 Pi Steradian Field of View (Diffuser)
(Reflection from Snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.74	7.40E-01	6.40E+01	6.53E-01
5	580-706	5	0.85	8.50E-01	7.26E+01	5.76E-01
6	687-819	5	0.71	7.10E-01	5.47E+01	4.14E-01
7	767-974	5	0.90	9.00E-01	6.52E+01	3.15E-01

Record No. 0018

Time: 0954 (Pacific Standard)

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.78	3.90E+00	1.56E+02	1.59E+00
5	580-706	1	0.72	3.60E+00	1.44E+02	1.14E+00

Record No. 0019

Time: 0954 (Pacific Standard)

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	5	0.33	3.30E-01	1.34E+01	1.01E-01
7	767-974	1	0.24	1.20E+00	4.87E+01	2.35E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 February 1977

Time: 1239 (Pacific Standard)

Site: West of Kearsarge Pass at High Camp
Measurement by: Dozier, Marks

Altitude: 3404 m (11170 ft)

Latitude: +36,46,22
Longitude: -118,23,08

Record No. 0020

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.83	4.15E+00	1.66E+02	1.69E+00
5	580-706	1	0.84	4.20E+00	1.68E+02	1.33E+00

Record No. 0021

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	5	0.34	3.40E-01	1.38E+01	1.04E-01
7	767-974	1	0.24	1.20E+00	4.87E+01	2.35E-01

Record No. 0022

Time: 1245 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.39	1.95E+00	1.68E+02	1.72E+00
5	580-706	1	0.48	2.40E+00	2.05E+02	1.63E+00
6	687-819	1	0.45	2.25E+00	1.73E+02	1.31E+00
7	767-974	1	0.63	3.15E+00	2.28E+02	1.10E+00

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-NA, SERIAL NO. 3459

Date: 13 February 1977

Time: 1245 (Pacific Standard)

Site: West of Kearsarge Pass at High Camp
Measurement by: Dozier, Marks

Altitude: 3404 m (11170 ft)

Latitude: +36,46,22
Longitude: -118,23,08

Record No. 0023

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.25	2.50E-01	2.16E+01	2.21E-01
5	580-706	5	0.27	2.70E-01	2.31E+01	1.83E-01
6	687-819	5	0.25	2.50E-01	1.93E+01	1.46E-01
7	767-974	5	0.47	4.70E-01	3.41E+01	1.65E-01

Record No. 0024

2 Pi Steradian Field of View (Diffuser)
(Reflection from Snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.21	1.05E+00	9.07E+01	9.26E-01
5	580-706	1	0.23	1.15E+00	9.82E+01	7.79E-01
6	687-819	1	0.20	1.00E+00	7.70E+01	5.83E-01
7	767-974	1	0.23	1.15E+00	8.33E+01	4.02E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 February 1977

Time: 1424 (Pacific Standard)

Site: Middle of Bullfrog Lake
Measurement by: Dozier, Marks

Altitude: 3230 m (10600 ft)

Latitude: +36,46,18
Longitude: -118,24,10

Record No. 0025

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.41	2.05E+00	1.77E+02	1.81E+00
5	580-706	1	0.50	2.50E+00	2.14E+02	1.69E+00
6	687-819	1	0.48	2.40E+00	1.85E+02	1.40E+00
7	767-974	1	0.66	3.30E+00	2.39E+02	1.15E+00

Record No. 0026

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.26	2.60E-01	2.25E+01	2.29E-01
5	580-706	5	0.28	2.30E-01	2.39E+01	1.90E-01
6	687-819	5	0.26	2.60E-01	2.00E+01	1.52E-01
7	767-974	5	0.36	3.60E-01	2.61E+01	1.26E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 February 1977

Time: 1424 (Pacific Standard)

Site: Middle of Bullfrog Lake
Measurement by: Dozier, Marks

Altitude: 3230 m (10600 ft)

Latitude: +36,46,18
Longitude: -118,24,10

Record No. 0027

2 Pi Steradian Field of View (Diffuser)
(Reflection from Snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.70	7.00E-01	6.05E+01	6.18E-01
5	580-706	5	0.80	8.00E-01	6.83E+01	5.42E-01
6	687-819	5	0.69	6.90E-01	5.31E+01	4.02E-01
7	767-974	5	0.91	9.10E-01	6.60E+01	3.19E-01

Record No. 0028

Time: 1431 (Pacific Standard)

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.69	3.45E+00	1.38E+02	1.41E+00
5	580-706	1	0.76	3.80E+00	1.52E+02	1.21E+00

Record No. 0029

Time: 1431 (Pacific Standard)

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	5	0.32	3.20E-01	1.30E+01	9.82E-02
7	767-974	1	0.24	1.20E+00	4.87E+01	2.35E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 February 1977 Time: 1653 (Pacific Standard)

Site: West of Kearsarge Pass at High Camp
Measurement by: Dozier, Marks

Altitude: 3404 m (11170 ft) Latitude: +36,46,22
Longitude: -118,23,08

Record No. 0030

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	7.00E+01	7.14E-01
5	580-706	1	0.35	1.75E+00	7.00E+01	5.56E-01
6	687-819	5	0.23	2.30E-01	9.20E+00	6.97E-02
7	767-974	5	0.91	9.10E-01	3.64E+01	1.76E-01

Record No. 0031 Time: 1700 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.56	5.60E-01	4.84E+01	4.94E-01
5	580-706	5	0.68	6.80E-01	5.81E+01	4.61E-01
6	687-819	5	0.76	7.60E-01	5.85E+01	4.43E-01
7	767-974	1	0.21	1.05E+00	7.60E+01	3.67E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 February 1977

Time: 1700 (Pacific Standard)

Site: West of Kearsarge Pass at High Camp
Measurement by: Dozier, Marks

Altitude: 3404 m (11170 ft)

Latitude: +36,46,22

Longitude: -118,23,08

Record No. 0032

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.22	4.40E-02	3.81E+00	3.88E-02
5	580-706	25	0.27	5.40E-02	4.62E+00	3.66E-02
6	687-819	25	0.34	6.80E-02	5.24E+00	3.97E-02
7	767-974	25	0.46	9.20E-02	6.67E+00	3.22E-02

Record No. 0033

2 Pi Steradian Field of View (Diffuser)
(Reflection from Snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.28	5.60E-02	4.84E+00	4.94E-02
5	580-706	25	0.38	7.60E-02	6.50E+00	5.16E-02
6	687-819	25	0.44	8.80E-02	6.78E+00	5.13E-02
7	767-974	25	0.64	1.28E-01	9.28E+00	4.48E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 14 February 1977

Time: 0804 (Pacific Standard)

Site: West of Kearsarge Pass at High Camp
Measurement by: Dozier, Marks

Altitude: 3404 m (11170 ft)

Latitude: +36,46,22

Longitude: -118,23,08

Record No. 0034

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun -- Slight thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.64E+01	8.82E-01
5	580-706	1	0.26	1.30E+00	1.11E+02	8.81E-01
6	687-819	1	0.26	1.30E+00	1.00E+02	7.58E-01
7	767-974	1	0.37	1.85E+00	1.34E+02	6.47E-01

Record No. 0035

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.51	1.02E-01	8.82E+00	9.00E-02
5	580-706	25	0.54	1.08E-01	9.23E+00	7.33E-02
6	687-819	25	0.68	1.36E-01	1.05E+01	7.93E-02
7	767-974	5	0.21	2.10E-01	1.52E+01	7.36E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 14 February 1977

Time: 0804 (Pacific Standard)

Site: West of Kearsarge Pass at High Camp

Measurement by: Dozier, Marks

Altitude: 3404 m (11170 ft)

Latitude: +36,46,22

Longitude: -118,23,08

Record No. 0036

2 Pi Steradian Field of View (Diffuser)
(Reflection from Snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.20	2.00E-01	1.73E+01	1.77E-01
5	580-706	5	0.22	2.20E-01	1.88E+01	1.49E-01
6	687-819	5	0.21	2.10E-01	1.62E+01	1.22E-01
7	767-974	5	0.27	2.70E-01	1.96E+01	9.46E-02

Record No. 0037

Time: 0813 (Pacific Standard)

1° Field of View (Lens) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	4.80E+01	4.90E-01
5	580-706	1	0.30	1.50E+00	6.00E+01	4.76E-01

Record No. 0038

Time: 0813 (Pacific Standard)

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam Radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	25	0.36	1.72E-01	6.97E+00	5.28E-02
7	767-974	5	0.62	6.20E-01	2.52E+01	1.22E-01

Date: 13 April 1977

Time: 1023 (Pacific Standard)

Site: Mammoth Lodge Parking Lot

Measurement by: Marks et al

Altitude: 2731 m (8960 ft)

Latitude: +37,39,07

Longitude: -119,02,07

Record No. 0039

15° Field of View (Plane Glass)

(Overhead sky radiation -- slight thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.61	6.10E-01	2.44E+01	2.49E-01
5	580-706	5	0.52	5.20E-01	2.09E+01	1.66E-01
6	687-819	5	0.41	4.10E-01	1.66E+01	1.26E-01
7	767-974	5	0.38	3.80E-01	1.55E+01	7.47E-02

Record No. 0040

Time: 1026 (Pacific Standard)

15° Field of View (Plane Glass)

(Vertical downwards)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.36	3.60E-01	1.44E+01	1.47E-01
5	580-706	5	0.36	3.60E-01	1.45E+01	1.15E-01
6	687-819	5	0.32	3.20E-01	1.30E+01	9.82E-02
7	767-974	5	0.48	4.80E-01	1.95E+01	9.44E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1030 (Pacific Standard)

Site: Mammoth Lodge Parking Lot
Measurement by: Marks et al

Altitude: 2731 m (8960 ft)

Latitude: +37,39,07
Longitude: -119,02,07

Record No. 0041

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- slight thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.38E+02	1.41E+00
5	580-706	1	0.36	1.80E+00	1.54E+02	1.22E+00
6	687-819	1	0.29	1.45E+00	1.12E+02	8.46E-01
7	767-974	1	0.42	2.10E+00	1.52E+02	7.34E-01

Record No. 0042

Time: 1032 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.62	1.24E-01	1.07E+01	1.09E-01
5	580-706	25	0.82	1.64E-01	1.40E+01	1.11E-01
6	687-819	25	0.83	1.76E-01	1.36E+01	1.03E-01
7	767-974	5	0.25	2.50E-01	1.81E+01	8.76E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1033 (Pacific Standard)

Site: Mammoth Lodge Parking Lot
Measurement by: Marks et al

Altitude: 2731 m (8960 ft)

Latitude: +37,39,07
Longitude: -119,02,07

Record No. 0043

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- slight thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.42	2.10E+00	1.81E+02	1.85E+00
5	580-706	1	0.48	2.40E+00	2.05E+02	1.63E+00
6	687-819	1	0.45	2.25E+00	1.73E+02	1.31E+00
7	767-974	1	0.62	3.10E+00	2.24E+02	1.08E+00

Record No. 0044

Time: 1035 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- slight thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.40	4.00E-01	3.46E+01	3.53E-01
5	580-706	5	0.72	7.20E-01	6.15E+01	4.88E-01
6	687-819	5	0.62	6.20E-01	4.77E+01	3.62E-01
7	767-974	1	0.27	1.35E+00	9.77E+01	4.72E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1219 (Pacific Standard)

Site: Mammoth Mountain, Top No. 1 Chairlift
Measurement by: Marks et al

Altitude: 2974 m (9760 ft)

Latitude: +37,38,26

Longitude: -119,01,59

Record No. 0045

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- thin clouds, snowing lightly)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.64E+01	8.82E-01
5	580-706	1	0.23	1.15E+00	9.82E+01	7.79E-01
6	687-819	1	0.22	1.10E+00	8.47E+01	6.42E-01
7	767-974	1	0.29	1.45E+00	1.05E+02	5.07E-01

Record No. 0046

Time: 1221 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.12	6.00E-01	5.18E+01	5.29E-01
5	580-706	1	0.13	6.50E-01	5.55E+01	4.41E-01
6	687-819	1	0.11	5.50E-01	4.23E+01	3.21E-01
7	767-974	1	0.15	7.50E-01	5.43E+01	2.62E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1222 (Pacific Standard)

Site: Mammoth Mountain, Top No. 1 Chairlift
Measurement by: Marks et al

Altitude: 2974 m (9760 ft)

Latitude: +37,38,26
Longitude: -119,01,59

Record No. 0047

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- thin clouds, snowing lightly)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.04E+02	1.06E+00
5	580-706	1	0.27	1.35E+00	1.15E+02	9.15E-01
6	687-819	1	0.25	1.25E+00	9.63E+01	7.29E-01
7	767-974	1	0.31	1.55E+00	1.12E+02	5.42E-01

Record No. 0048

Time: 1223 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- thin clouds, snowing lightly)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.15	7.50E-01	6.48E+01	6.61E-01
5	580-706	1	0.14	7.00E-01	5.98E+01	4.74E-01
6	687-819	1	0.14	7.00E-01	5.39E+01	4.08E-01
7	767-974	1	0.20	1.00E+00	7.24E+01	3.50E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1302 (Pacific Standard)

Site: Mammoth Mountain, Back Side No. 3 Chair
Measurement by: Marks et al

Altitude: 3182 m (10440 ft)

Latitude: +37,38,03
Longitude: -119,02,04

Record No. 0049

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- complete cloud cover, light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.04E+02	1.06E+00
5	580-706	1	0.25	1.25E+00	1.07E+02	8.47E-01
6	687-819	1	0.22	1.10E+00	8.47E+01	6.42E-01
7	767-974	1	0.28	1.40E+00	1.01E+02	4.90E-01

Record No. 0050

Time: 1303 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.13	6.50E-01	5.62E+01	5.73E-01
5	580-706	1	0.16	8.00E-01	6.83E+01	5.42E-01
6	687-819	1	0.13	6.50E-01	5.00E+01	3.79E-01
7	767-974	1	0.18	9.00E-01	6.52E+01	3.15E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1304 (Pacific Standard)

Site: Mammoth Mountain, Back Side No. 3 Chair
Measurement by: Marks et al

Altitude: 3182 m (10440 ft)

Latitude: +37,38,03
Longitude: -119,02,04

Record No. 0051

2 Pi Steradian Field of View (Diffuser)
(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.15	7.50E-01	6.48E+01	6.61E-01
5	580-706	1	0.16	8.00E-01	6.83E+01	5.42E-01
6	687-819	1	0.14	7.00E-01	5.39E+01	4.08E-01
7	767-974	1	0.19	9.50E-01	6.88E+01	3.32E-01

Record No. 0052

Time: 1305 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On slope, away from sun -- complete cloud cover, light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.78E+01	7.93E-01
5	580-706	1	0.19	9.50E-01	8.11E+01	6.44E-01
6	687-819	1	0.22	1.10E+00	8.47E+01	6.42E-01
7	767-974	1	0.32	1.60E+00	1.16E+02	5.60E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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Date: 13 April 1977

Time: 1307 (Pacific Standard)

Site: Mammoth Mountain, Back Side No. 3 Chair

Measurement by: Marks et al

Altitude: 3182 m (10440 ft)

Latitude: +37,38,03

Longitude: -119,02,04

Record No. 0053

2 Pi Steradian Field of View (Diffuser)

(Surface normal to sun — complete cloud cover, light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.56E+02	1.59E+00
5	580-706	1	0.42	2.10E+00	1.79E+02	1.42E+00
6	687-819	1	0.38	1.90E+00	1.46E+02	1.11E+00
7	767-974	1	0.44	2.20E+00	1.59E+02	7.69E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1342 (Pacific Standard)

Site: Mammoth Mountain, Halfway down St. Anton
Measurement by: Marks et al

Altitude: 2956 m (9700 ft)

Latitude: +37,38,27

Longitude: -119,02,13

Record No. 0054

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- cloud cover, but unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.52	5.20E-01	4.50E+01	4.59E-01
5	580-706	5	0.55	5.50E-01	4.70E+01	3.73E-01
6	687-819	5	0.58	5.80E-01	4.47E+01	3.38E-01
7	767-974	5	0.92	9.20E-01	6.67E+01	3.22E-01

Record No. 0055

Time: 1344 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.35	3.50E-01	3.03E+01	3.09E-01
5	580-706	5	0.39	3.90E-01	3.33E+01	2.64E-01
6	687-819	5	0.35	3.50E-01	2.69E+01	2.04E-01
7	767-974	5	0.44	4.40E-01	3.19E+01	1.54E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1345 (Pacific Standard)

Site: Mammoth Mountain, Halfway down St. Anton

Measurement by: Marks et al

Altitude: 2956 m (9700 ft)

Latitude: +37,38,27

Longitude: -119,02,13

Record No. 0056

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- through cloud)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.62	6.20E-01	5.36E+01	5.47E-01
5	580-706	5	0.60	6.00E-01	5.12E+01	4.07E-01
6	687-819	5	0.50	5.00E-01	3.85E+01	2.92E-01
7	767-974	5	0.60	6.00E-01	4.35E+01	2.10E-01

Record No. 0057

Time: 1346 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- cloud cover, but unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.41	4.10E-01	3.55E+01	3.62E-01
5	580-706	5	0.45	4.50E-01	3.84E+01	3.05E-01
6	687-819	5	0.39	3.90E-01	3.00E+01	2.27E-01
7	767-974	5	0.49	4.90E-01	3.55E+01	1.72E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977 Time: 1541 (Pacific Standard)

Site: Mammoth Mountain, Top No. 3 Chairlift
Measurement by: Marks et al

Altitude: 3133 m (10280 ft) Latitude: +37,38,09
Longitude: -119,01,51

Record No. 0058

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- sparse clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.19	9.50E-01	8.21E+01	8.38E-01
5	580-706	1	0.22	1.10E+00	9.39E+01	7.46E-01
6	687-819	1	0.23	1.15E+00	8.85E+01	6.71E-01
7	767-974	1	0.24	1.20E+00	8.69E+01	4.20E-01

Record No. 0059 Time: 1543 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.40	4.00E-01	3.46E+01	3.53E-01
5	580-706	5	0.34	3.40E-01	2.90E+01	2.30E-01
6	687-819	5	0.24	2.40E-01	1.85E+01	1.40E-01
7	767-974	5	0.51	5.10E-01	3.70E+01	1.79E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1545 (Pacific Standard)

Site: Mammoth Mountain, Top No. 3 Chairlift
Measurement by: Marks et al

Altitude: 3133 m (10280 ft)

Latitude: +37,38,09
Longitude: -119,01,51

Record No. 0060

2 Pi Steradian Field of View (Diffuser)
(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.25	2.50E-01	2.16E+01	2.21E-01
5	580-706	5	0.52	5.20E-01	4.44E+01	3.52E-01
6	687-819	5	0.54	5.40E-01	4.16E+01	3.15E-01
7	767-974	5	0.65	6.50E-01	4.71E+01	2.28E-01

Record No. 0061

Time: 1546 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
([ERROR?] Normal to slope, away from sun -- sparse clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.32	3.20E-01	2.77E+01	2.82E-01
5	580-706	5	0.32	3.20E-01	2.73E+01	2.17E-01
6	687-819	5	0.22	2.20E-01	1.69E+01	1.28E-01
7	767-974	5	0.34	3.40E-01	2.46E+01	1.19E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 April 1977

Time: 1547 (Pacific Standard)

Site: Mammoth Mountain, Top No. 3 Chairlift
Measurement by: Marks et al

Altitude: 3133 m (10280 ft)

Latitude: +37,38,09

Longitude: -119,01,51

Record No. 0062

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- sparse clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.16	8.00E-01	6.91E+01	7.05E-01
5	580-706	1	0.20	1.00E+00	8.54E+01	6.78E-01
6	687-819	1	0.18	9.00E-01	6.93E+01	5.25E-01
7	767-974	1	0.15	7.50E-01	5.43E+01	2.62E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 23 April 1977

Time: 1050 (Pacific Standard)

Site: Summit of Cottonwood Pass
Measurement by: Dozier

Altitude: 3401 m (11160 ft)

Latitude: +36,27,12
Longitude: -118,12,53

Record No. 0063

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.41	2.05E+00	1.58E+02	1.20E+00
7	767-974	1	0.57	2.85E+00	2.06E+02	9.97E-01

Record No. 0064

Time: 1052 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.38E+02	1.41E+00
5	580-706	1	0.38	1.90E+00	1.62E+02	1.29E+00
6	687-819	1	0.33	1.65E+00	1.27E+02	9.62E-01
7	767-974	1	0.45	2.25E+00	1.63E+02	7.87E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 23 April 1977

Time: 1054 (Pacific Standard)

Site: Summit of Cottonwood Pass

Measurement by: Dozier

Altitude: 3401 m (11160 ft)

Latitude: +36,27,12

Longitude: -118,12,53

Record No. 0065

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.21	1.05E+00	9.07E+01	9.26E-01
5	580-706	1	0.25	1.25E+00	1.07E+02	8.47E-01
6	687-819	1	0.20	1.00E+00	7.70E+01	5.83E-01
7	767-974	1	0.23	1.15E+00	8.33E+01	4.02E-01

Record No. 0066

Time: 1056 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.33	3.30E-01	2.85E+01	2.91E-01
5	580-706	5	0.44	4.40E-01	3.76E+01	2.98E-01
6	687-819	5	0.43	4.30E-01	3.31E+01	2.51E-01
7	767-974	5	0.63	6.30E-01	4.57E+01	2.21E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 23 April 1977

Time: 1058 (Pacific Standard)

Site: Summit of Cottonwood Pass
Measurement by: Dozier

Altitude: 3401 m (11160 ft)

Latitude: +36,27,12
Longitude: -118,12,53

Record No. 0067

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.33	3.30E-01	2.85E+01	2.91E-01
5	580-706	5	0.34	3.40E-01	2.90E+01	2.30E-01
6	687-819	5	0.30	3.00E-01	2.31E+01	1.75E-01
7	767-974	5	0.39	3.90E-01	2.83E+01	1.37E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 0930 (Pacific Standard)

Site: Big Whitney Meadow, North End

Measurement by: Egelhofer, Haskell et al

Altitude: 2974 m (9760 ft)

Latitude: +36,26,44

Longitude: -118,16,08

Record No. 0068

2 Pi Steradian Field of View (Diffuser)

(Surface normal to sun -- 7/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.51	5.10E-01	4.41E+01	4.50E-01
5	580-706	5	0.60	6.00E-01	5.12E+01	4.07E-01
6	687-819	1	0.14	7.00E-01	5.39E+01	4.08E-01
7	767-974	1	0.24	1.20E+00	8.69E+01	4.20E-01

Record No. 0069

Time: 0935 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(On horizontal surface -- cloudy but sun unobstructed)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.64E+01	8.82E-01
5	580-706	1	0.30	1.50E+00	1.28E+02	1.02E+00
6	687-819	1	0.36	1.80E+00	1.39E+02	1.05E+00
7	767-974	1	0.42	2.10E+00	1.52E+02	7.34E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 0938 (Pacific Standard)

Site: Big Whitney Meadow, North End

Measurement by: Egelhofer, Haskell et al

Altitude: 2974 m (9760 ft)

Latitude: +36,26,44

Longitude: -118,16,08

Record No. 0070

2 Pi Steradian Field of View (Diffuser)

(Surface away from sun -- 7/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.32	3.20E-01	2.77E+01	2.82E-01
5	580-706	5	0.39	3.90E-01	3.33E+01	2.64E-01
6	687-819	5	0.37	3.70E-01	2.85E+01	2.16E-01
7	767-974	5	0.56	5.60E-01	4.06E+01	1.96E-01

Record No. 0071

Time: 0940 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.50	1.00E-01	8.65E+00	8.83E-02
5	580-706	25	0.57	1.14E-01	9.75E+00	7.74E-02
6	687-819	25	0.60	1.20E-01	9.24E+00	7.00E-02
7	767-974	25	0.94	1.88E-01	1.36E+01	6.58E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 0942 (Pacific Standard)

Site: Big Whitney Meadow, North End

Measurement by: Egelhofer, Haskell et al

Altitude: 2974 m (9760 ft)

Latitude: +36,26,44

Longitude: -118,16,08

Record No. 0072

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	438-556	5	0.69	6.90E-01	5.97E+01	6.09E-01
5	580-706	5	0.86	8.60E-01	7.34E+01	5.83E-01
6	687-819	5	0.36	3.60E-01	2.77E+01	2.10E-01
7	767-974	5	0.70	7.00E-01	5.07E+01	2.45E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 0955 (Pacific Standard)

Site: Big Whitney Meadow, North Central
Measurement by: Egelhofer, Haskell et al

Altitude: 2971 m (9750 ft)

Latitude: +36,26,37
Longitude: -118,16,04

Record No. 0073

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- sun obscured by cloud)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.67	6.70E-01	5.80E+01	5.91E-01
5	580-706	5	0.84	8.40E-01	7.17E+01	5.69E-01
6	687-819	5	0.73	7.30E-01	5.62E+01	4.26E-01
7	767-974	1	0.20	1.00E+00	7.24E+01	3.50E-01

Record No. 0074

Time: 0957 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.73	7.30E-01	6.31E+01	6.44E-01
5	580-706	5	0.90	9.00E-01	7.69E+01	6.10E-01
6	687-819	5	0.84	8.40E-01	6.47E+01	4.90E-01
7	767-974	1	0.22	1.10E+00	7.96E+01	3.85E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 1000 (Pacific Standard)

Site: Big Whitney Meadow, North Central
Measurement by: Egelhofer, Haskell et al

Altitude: 2971 m (9750 ft)

Latitude: +36,26,37
Longitude: -118,16,04

Record No. 0075

2 Pi Steradian Field of View (Diffuser)
(Reflection from grass)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.43	8.60E-02	7.44E+00	7.59E-02
5	580-706	25	0.65	1.30E-01	1.11E+01	8.82E-02
6	687-819	5	0.27	2.70E-01	2.08E+01	1.57E-01
7	767-974	5	0.25	2.50E-01	1.81E+01	8.76E-02

Record No. 0076

Time: 1003 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.48	4.80E-01	4.15E+01	4.24E-01
5	580-706	5	0.55	5.50E-01	4.70E+01	3.73E-01
6	687-819	5	0.53	5.30E-01	4.08E+01	3.09E-01
7	767-974	5	0.73	7.30E-01	5.29E+01	2.56E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 1007 (Pacific Standard)

Site: Big Whitney Meadow, 10° SE Slope

Measurement by: Egelhofer, Haskell et al

Altitude: 2977 m (9770 ft)

Latitude: +36,26,35

Longitude: -118,16,10

Record No. 0077

2 Pi Steradian Field of View (Diffuser)

(Surface normal to sun -- sun obscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.78	7.80E-01	6.75E+01	6.88E-01
5	580-706	1	0.18	9.00E-01	7.69E+01	6.10E-01
6	687-819	1	0.18	9.00E-01	6.93E+01	5.25E-01
7	767-974	1	0.26	1.30E+00	9.41E+01	4.55E-01

Record No. 0078

Time: 1008 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.42	4.20E-01	3.63E+01	3.71E-01
5	580-706	5	0.54	5.40E-01	4.61E+01	3.66E-01
6	687-819	5	0.58	5.80E-01	4.47E+01	3.38E-01
7	767-974	5	0.68	6.80E-01	4.93E+01	2.38E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 1010 (Pacific Standard)

Site: Big Whitney Meadow, 10° SE Slope
Measurement by: Egelhofer, Haskell et al

Altitude: 2977 m (9770 ft)

Latitude: +36,26,35
Longitude: -118,16,10

Record No. 0079

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- sun partly obscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.19	9.50E-01	8.21E+01	8.38E-01
5	580-706	1	0.20	1.00E+00	8.54E+01	6.78E-01
6	687-819	1	0.79	3.95E+00	3.04E+02	2.30E+00
7	767-974	1	0.20	1.00E+00	7.24E+01	3.50E-01

Record No. 0080

Time: 1015 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Normal to slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.41	8.20E-02	7.09E+00	7.24E-02
5	580-706	25	0.52	1.04E-01	8.89E+00	7.06E-02
6	687-819	25	0.62	1.24E-01	9.55E+00	7.23E-02
7	767-974	25	0.82	1.64E-01	1.19E+01	5.74E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 1230 (Pacific Standard)

Site: Summit of Siberian Pass

Measurement by: Dozier

Altitude: 3352 m (11000 ft)

Latitude: +36,28,08

Longitude: -118,16,15

Record No. 0081

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- total cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.62	6.20E-01	5.36E+01	5.47E-01
5	580-706	5	0.73	7.30E-01	6.23E+01	4.95E-01
6	687-819	5	0.60	6.00E-01	4.62E+01	3.50E-01
7	767-974	5	0.81	8.10E-01	5.87E+01	2.84E-01

Record No. 0082

Time: 1232 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- total cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.60	6.00E-01	5.19E+01	5.30E-01
5	580-706	5	0.71	7.10E-01	6.06E+01	4.81E-01
6	687-819	5	0.62	6.20E-01	4.77E+01	3.62E-01
7	767-974	5	0.83	8.30E-01	6.02E+01	2.91E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 1234 (Pacific Standard)

Site: Summit of Siberian Pass
Measurement by: Dozier

Altitude: 3352 m (11000 ft)

Latitude: +36,28,08
Longitude: -118,16,15

Record No. 0083

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- total cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.70	7.00E-01	6.05E+01	6.18E-01
5	580-706	5	0.85	8.50E-01	7.26E+01	5.76E-01
6	687-819	5	0.76	7.60E-01	5.85E+01	4.43E-01
7	767-974	1	0.21	1.05E+00	7.60E+01	3.67E-01

Record No. 0084

Time: 1235 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.75	1.50E-01	1.30E+01	1.32E-01
5	580-706	25	0.96	1.92E-01	1.64E+01	1.30E-01
6	687-819	5	0.19	1.90E-01	1.46E+01	1.11E-01
7	767-974	5	0.25	2.50E-01	1.81E+01	8.76E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 24 April 1977

Time: 1237 (Pacific Standard)

Site: Summit of Siberian Pass
Measurement by: Dozier

Altitude: 3352 m (11000 ft)

Latitude: +36,28,08
Longitude: -118,16,15

Record No. 0085

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.53	5.30E-01	4.58E+01	4.68E-01
5	580-706	5	0.60	6.00E-01	5.12E+01	4.07E-01
6	687-819	5	0.49	4.90E-01	3.77E+01	2.86E-01
7	767-974	5	0.56	5.60E-01	4.06E+01	1.96E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0732 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Dozier

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38
Longitude: -118,16,24

Record No. 0086

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.43E+02	1.45E+00
5	580-706	1	0.42	2.10E+00	1.79E+02	1.42E+00
6	687-819	1	0.38	1.90E+00	1.46E+02	1.11E+00
7	767-974	1	0.53	2.65E+00	1.92E+02	9.27E-01

Record No. 0087

Time: 0734 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.74	7.40E-01	6.40E+01	6.53E-01
5	580-706	5	0.88	8.80E-01	7.52E+01	5.96E-01
6	687-819	5	0.70	7.00E-01	5.39E+01	4.08E-01
7	767-974	5	0.92	9.20E-01	6.67E+01	3.22E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0736 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Dozier

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38
Longitude: -118,16,24

Record No. 0088

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.57	1.14E-01	9.86E+00	1.01E-01
5	580-706	25	0.53	1.06E-01	9.06E+00	7.19E-02
6	687-819	25	0.54	1.08E-01	8.32E+00	6.30E-02
7	767-974	25	0.84	1.68E-01	1.22E+01	5.88E-02

Record No. 0089

Time: 0738 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.38	3.80E-01	3.29E+01	3.35E-01
5	580-706	5	0.45	4.50E-01	3.84E+01	3.05E-01
6	687-819	5	0.42	4.20E-01	3.23E+01	2.45E-01
7	767-974	5	0.52	5.20E-01	3.77E+01	1.82E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0740 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails

Measurement by: Dozier

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38

Longitude: -118,16,24

Record No. 0090

2 Pi Steradian Field of View (Diffuser)
(Reflection from short grass)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.58	1.16E-01	1.00E+01	1.02E-01
5	580-706	25	0.77	1.54E-01	1.32E+01	1.04E-01
6	687-819	25	0.94	1.88E-01	1.45E+01	1.10E-01
7	767-974	5	0.27	2.70E-01	1.96E+01	9.46E-02

Record No. 0091

Time: 0852 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.43	2.15E+00	1.84E+02	1.46E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.52	2.60E+00	1.88E+02	9.09E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0854 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Dozier

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38
Longitude: -118,16,24

Record No. 0092

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.21	1.05E+00	9.07E+01	9.26E-01
5	580-706	1	0.25	1.25E+00	1.07E+02	8.47E-01
6	687-819	1	0.21	1.05E+00	8.08E+01	6.12E-01
7	767-974	1	0.29	1.45E+00	1.05E+02	5.07E-01

Record No. 0093

Time: 0856 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.58	1.16E-01	1.00E+01	1.02E-01
5	580-706	25	0.47	9.40E-02	8.04E+00	6.38E-02
6	687-819	25	0.57	1.14E-01	8.78E+00	6.65E-02
7	767-974	25	0.92	1.84E-01	1.33E+01	6.44E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0858 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails

Measurement by: Dozier

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38

Longitude: -118,16,24

Record No. 0094

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.57	5.70E-01	4.93E+01	5.03E-01
5	580-706	5	0.65	6.50E-01	5.55E+01	4.41E-01
6	687-819	5	0.56	5.60E-01	4.31E+01	3.27E-01
7	767-974	5	0.66	6.60E-01	4.78E+01	2.31E-01

Record No. 0095

Time: 0900 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from grass)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.66	1.32E-01	1.14E+01	1.17E-01
5	580-706	25	0.93	1.86E-01	1.59E+01	1.26E-01
6	687-819	5	0.22	2.20E-01	1.69E+01	1.28E-01
7	767-974	5	0.33	3.30E-01	2.39E+01	1.16E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0915 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Dozier

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38
Longitude: -118,16,24

Record No. 0096

15° Field of View (Plane Glass)
(Overhead sky radiation)

<u>Eand</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.87	1.74E-01	6.96E+00	7.10E-02
5	580-706	25	0.68	1.36E-01	5.47E+00	4.34E-02
6	687-819	25	0.38	7.60E-02	3.08E+00	2.33E-02
7	767-974	25	0.41	8.20E-02	3.33E+00	1.61E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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Date: 25 April 1977

Time: 0936 (Pacific Standard)

Site: West Side Army Pass Trail
Measurement by: Egelhofer, Haskell

Altitude: 3438 m (11280 ft)

Latitude: +36,29,45
Longitude: -118,15,07

Record No. 0097

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.30	1.50E+00	1.30E+02	1.32E+00
5	580-706	1	0.47	2.35E+00	2.01E+02	1.59E+00
6	687-819	1	0.42	2.10E+00	1.62E+02	1.22E+00
7	767-974	1	0.57	2.85E+00	2.06E+02	9.97E-01

Record No. 0098

Time: 0938 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.28	1.40E+00	1.21E+02	1.23E+00
5	580-706	1	0.32	1.60E+00	1.37E+02	1.08E+00
6	687-819	1	0.28	1.40E+00	1.08E+02	8.17E-01
7	767-974	1	0.36	1.80E+00	1.30E+02	6.30E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0940 (Pacific Standard)

Site: West Side Army Pass Trail

Measurement by: Egelhofer, Haskell

Altitude: 3438 m (11280 ft)

Latitude: +36,29,45

Longitude: -118,15,07

Record No. 0099

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.20	2.00E-01	1.73E+01	1.77E-01
5	580-706	5	0.22	2.20E-01	1.88E+01	1.49E-01
6	687-819	5	0.20	2.00E-01	1.54E+01	1.17E-01
7	767-974	5	0.28	2.80E-01	2.03E+01	9.81E-02

Record No. 0100

Time: 0942 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.24	2.40E-01	2.08E+01	2.12E-01
5	580-706	5	0.31	3.10E-01	2.65E+01	2.10E-01
6	687-819	5	0.36	3.60E-01	2.77E+01	2.10E-01
7	767-974	5	0.54	5.40E-01	3.91E+01	1.89E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 0943 (Pacific Standard)

Site: West Side Army Pass Trail
Measurement by: Egelhofer, Haskell

Altitude: 3438 m (11280 ft)

Latitude: +36,29,45

Longitude: -118,15,07

Record No. 0101

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.64E+01	8.82E-01
5	580-706	1	0.22	1.10E+00	9.39E+01	7.46E-01
6	687-819	5	0.99	9.90E-01	7.62E+01	5.77E-01
7	767-974	1	0.23	1.15E+00	8.33E+01	4.02E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 1056 (Pacific Standard)

Site: South Shoulder Mount Langley
Measurement by: Egelhofer, Haskell

Altitude: 3913 m (12840 ft)

Latitude: +36,30,09
Longitude: -118,14,45

Record No. 0102

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.40	2.00E+00	1.73E+02	1.76E+00
5	580-706	1	0.47	2.35E+00	2.01E+02	1.59E+00
6	687-819	1	0.42	2.10E+00	1.62E+02	1.22E+00
7	767-974	1	0.58	2.90E+00	2.10E+02	1.01E+00

Record No. 0103

Time: 1057 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.68	6.80E-01	5.88E+01	6.00E-01
5	580-706	5	0.56	5.60E-01	4.78E+01	3.80E-01
6	687-819	5	0.26	2.60E-01	2.00E+01	1.52E-01
7	767-974	5	0.40	4.00E-01	2.90E+01	1.40E-01

Date: 25 April 1977

Time: 1058 (Pacific Standard)

Site: South Shoulder Mount Langley
Measurement by: Egelhofer, Haskell

Altitude: 3913 m (12840 ft)

Latitude: +36,30,09
Longitude: -118,14,45

Record No. 0104

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.43E+02	1.45E+00
5	580-706	1	0.40	2.00E+00	1.71E+02	1.36E+00
6	687-819	1	0.34	1.70E+00	1.31E+02	9.92E-01
7	767-974	1	0.44	2.20E+00	1.59E+02	7.69E-01

Record No. 0105

Time: 1059 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.34	3.40E-01	2.94E+01	3.00E-01
5	580-706	5	0.46	4.60E-01	3.93E+01	3.12E-01
6	687-819	5	0.46	4.60E-01	3.54E+01	2.68E-01
7	767-974	5	0.64	6.40E-01	4.64E+01	2.24E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 1100 (Pacific Standard)

Site: South Shoulder Mount Langley

Measurement by: Egelhofer, Haskell

Altitude: 3913 m (12840 ft)

Latitude: +36,30,09

Longitude: -118,14,45

Record No. 0106

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.04E+02	1.06E+00
5	580-706	1	0.26	1.30E+00	1.11E+02	8.81E-01
6	687-819	1	0.21	1.05E+00	8.08E+01	6.12E-01
7	767-974	1	0.24	1.20E+00	8.69E+01	4.20E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 25 April 1977

Time: 1345 (Pacific Standard)

Site: Summit Mount Langley

Measurement by: Egelhofer, Haskell

Altitude: 4275 m (14027 ft)

Latitude: +36,31,24

Longitude: -118,14,20

Record No. 0107

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.47	2.35E+00	2.01E+02	1.59E+00
6	687-819	1	0.42	2.10E+00	1.62E+02	1.22E+00
7	767-974	1	0.57	2.85E+00	2.06E+02	9.97E-01

Record No. 0108

Time: 1346 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.30	1.50E+00	1.30E+02	1.32E+00
5	580-706	1	0.41	2.05E+00	1.75E+02	1.39E+00
6	687-819	1	0.36	1.80E+00	1.39E+02	1.05E+00
7	767-974	1	0.47	2.35E+00	1.70E+02	8.22E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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Date: 25 April 1977

Time: 1347 (Pacific Standard)

Site: Summit Mount Langley

Measurement by: Egelhofer, Haskell

Altitude: 4275 m (14027 ft)

Latitude: +36,31,24

Longitude: -118,14,20

Record No. 0109

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.30	3.00E-01	2.59E+01	2.65E-01
5	580-706	5	0.32	3.20E-01	2.73E+01	2.17E-01
6	687-819	5	0.26	2.60E-01	2.00E+01	1.52E-01
7	767-974	5	0.36	3.60E-01	2.61E+01	1.26E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 20 March 1977

Time: 1017 (Pacific Standard)

Site: North Side of Forester Pass, on Bubbs Creek
Measurement by: Dozier

Altitude: 3489 m (11450 ft)

Latitude: +36,42,50
Longitude: -118,21,51

Record No. 0110

15° Field of View (Plane Glass)
(Overhead sky radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.61	1.22E-01	4.88E+00	4.98E-02
5	580-706	25	0.45	9.00E-02	3.64E+00	2.89E-02
6	687-819	25	0.21	4.20E-02	1.69E+00	1.28E-02
7	767-974	25	0.21	4.20E-02	1.69E+00	8.17E-03

Record No. 0111

Time: 1024 (Pacific Standard)

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.21	4.20E-02	1.68E+00	1.71E-02
5	580-706	125	0.94	3.76E-02	1.52E+00	1.21E-02
6	687-819	5	0.36	3.60E-01	1.45E+01	1.10E-01
7	767-974	1	0.27	1.35E+00	5.43E+01	2.62E-01

**SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467**

Date: 20 March 1977

Time: 1031 (Pacific Standard)

Site: North Side of Forester Pass, on Bubbs Creek
Measurement by: Dozier

Altitude: 3489 m (11450 ft)

Latitude: +36,42,50
Longitude: -118,21,51

Record No. 0112

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.39	1.95E+00	1.71E+02	1.74E+00
5	580-706	1	0.55	2.75E+00	2.21E+02	1.75E+00
6	687-819	1	0.48	2.40E+00	1.80E+02	1.36E+00
7	767-974	1	0.68	3.40E+00	2.45E+02	1.19E+00

Record No. 0113

Time: 1038 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Slope of 35°, away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.29	2.90E-01	2.54E+01	2.59E-01
5	580-706	5	0.30	3.00E-01	2.41E+01	1.91E-01
6	687-819	5	0.28	2.80E-01	2.10E+01	1.59E-01
7	767-974	5	0.31	3.10E-01	2.24E+01	1.08E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 20 March 1977

Time: 1040 (Pacific Standard)

Site: North Side of Forester Pass, on Bubbs Creek

Measurement by: Dozier

Altitude: 3489 m (11450 ft)

Latitude: +36,42,50

Longitude: -118,21,51

Record No. 0114

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.14E+02	1.16E+00
5	580-706	1	0.36	1.80E+00	1.44E+02	1.15E+00
6	687-819	1	0.30	1.50E+00	1.12E+02	8.52E-01
7	767-974	1	0.39	1.95E+00	1.41E+02	6.80E-01

Record No. 0115

Time: 1044 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.76E+01	8.94E-01
5	580-706	1	0.24	1.20E+00	9.62E+01	7.64E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.25	1.25E+00	9.03E+01	4.36E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 0848 (Pacific Standard)

Site: High Camp on North Side of Forester Pass
Measurement by: Dozier

Altitude: 3877 m (12720 ft)

Latitude: +36,42,03
Longitude: -118,22,18

Record No. 0116

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.58E+02	1.61E+00
5	580-706	1	0.51	2.55E+00	2.05E+02	1.62E+00
6	687-819	1	0.45	2.25E+00	1.69E+02	1.28E+00
7	767-974	1	0.64	3.20E+00	2.31E+02	1.12E+00

Record No. 0117

Time: 0853 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.73	1.46E-01	1.28E+01	1.30E-01
5	580-706	25	0.67	1.34E-01	1.07E+01	8.51E-02
6	687-819	25	0.57	1.14E-01	8.55E+00	6.48E-02
7	767-974	25	0.61	1.22E-01	8.78E+00	4.24E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 0856 (Pacific Standard)

Site: High Camp on North Side of Forester Pass

Measurement by: Dozier

Altitude: 3877 m (12720 ft)

Latitude: +36,42,03

Longitude: -118,22,18

Record No. 0118

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.82	8.20E-01	7.18E+01	7.33E-01
5	580-706	1	0.25	1.25E+00	1.00E+02	7.96E-01
6	687-819	1	0.22	1.10E+00	8.25E+01	6.25E-01
7	767-974	1	0.28	1.40E+00	1.01E+02	4.88E-01

Record No. 0119

Time: 0905 (Pacific Standard)

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(Beam radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.20	4.00E-02	1.60E+00	1.63E-02
5	580-706	125	0.92	3.68E-02	1.49E+00	1.18E-02
6	687-819	5	0.35	3.50E-01	1.41E+01	1.07E-01
7	767-974	1	0.27	1.35E+00	5.43E+01	2.62E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 0920 (Pacific Standard)

Site: High Camp on North Side of Forester Pass
Measurement by: Dozier

Altitude: 3877 m (12720 ft)

Latitude: +36,42,03
Longitude: -118,22,18

Record No. 0120

15° Field of View (Plane Glass) with Kodak Neutral Filter 4.0
(With filters, at target)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
6	687-819	125	0.04	1.60E-03	6.48E-02	4.91E-04
7	767-974	125	0.26	1.04E-02	4.19E-01	2.02E-03

Record No. 0121

Time: 0923 (Pacific Standard)

15° Field of View (Plane Glass)
(Without filters, at target)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.43	2.15E+00	8.60E+01	8.78E-01
5	580-706	1	0.50	2.50E+00	1.01E+02	8.02E-01
6	687-819	1	0.38	1.90E+00	7.68E+01	5.82E-01
7	767-974	1	0.46	2.30E+00	9.25E+01	4.47E-01

Record No. 0122

Time: 1018 (Pacific Standard)

15° Field of View (Plane Glass)
(Overhead sky radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.80	1.60E-01	6.40E+00	6.53E-02
5	580-706	25	0.68	1.36E-01	5.49E+00	4.36E-02
6	687-819	25	0.30	6.00E-02	2.42E+00	1.83E-02
7	767-974	25	0.37	7.40E-02	2.98E+00	1.44E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 1024 (Pacific Standard)

Site: High Camp on North Side of Forester Pass
Measurement by: Dozier

Altitude: 3877 m (12720 ft)

Latitude: +36,42,03

Longitude: -118,22,18

Record No. 0123

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.62E+02	1.65E+00
5	580-706	1	0.52	2.60E+00	2.09E+02	1.65E+00
6	687-819	1	0.45	2.25E+00	1.69E+02	1.28E+00
7	767-974	1	0.65	3.25E+00	2.35E+02	1.13E+00

Record No. 0124

Time: 1026 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.14E+02	1.16E+00
5	580-706	1	0.36	1.80E+00	1.44E+02	1.15E+00
6	687-819	1	0.31	1.55E+00	1.16E+02	8.81E-01
7	767-974	1	0.39	1.95E+00	1.41E+02	6.80E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 1028 (Pacific Standard)

Site: High Camp on North Side of Forester Pass

Measurement by: Dozier

Altitude: 3877 m (12720 ft)

Latitude: +36,42,03

Longitude: -118,22,18

Record No. 0125

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.90	1.80E-01	1.57E+01	1.61E-01
5	580-706	5	0.20	2.00E-01	1.60E+01	1.27E-01
6	687-819	25	0.60	1.20E-01	9.00E+00	6.82E-02
7	767-974	25	0.95	1.90E-01	1.37E+01	6.61E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 1258 (Pacific Standard)

Site: North Side of Forester Pass, below Camp
Measurement by: Dozier

Altitude: 3657 m (12000 ft)

Latitude: +36,42,19
Longitude: -118,22,13

Record No. 0126

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.39	1.95E+00	1.71E+02	1.74E+00
5	580-706	1	0.55	2.75E+00	2.21E+02	1.75E+00
6	687-819	1	0.50	2.50E+00	1.88E+02	1.42E+00
7	767-974	1	0.68	3.40E+00	2.45E+02	1.19E+00

Record No. 0127

Time: 1300 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.05E+02	1.07E+00
5	580-706	1	0.33	1.65E+00	1.32E+02	1.05E+00
6	687-819	1	0.30	1.50E+00	1.12E+02	8.52E-01
7	767-974	1	0.38	1.90E+00	1.37E+02	6.63E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 1303 (Pacific Standard)

Site: North Side of Forester Pass, below Camp

Measurement by: Dozier

Altitude: 3657 m (12000 ft)

Latitude: +36,42,19

Longitude: -118,22,13

Record No. 0128

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.20	2.00E-01	1.75E+01	1.79E-01
5	580-706	5	0.20	2.00E-01	1.60E+01	1.27E-01
6	687-819	5	0.18	1.80E-01	1.35E+01	1.02E-01
7	767-974	5	0.24	2.40E-01	1.73E+01	8.37E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 21 March 1977

Time: 1457 (Pacific Standard)

Site: On Bubbs Creek below East Vidette, in Forest
Measurement by: Dozier

Altitude: 3133 m (10280 ft)

Latitude: +36,44,20
Longitude: -118,22,55

Record No. 0129

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.40E+02	1.43E+00
5	580-706	1	0.46	2.30E+00	1.84E+02	1.46E+00
6	687-819	1	0.45	2.25E+00	1.69E+02	1.28E+00
7	767-974	1	0.63	3.15E+00	2.27E+02	1.10E+00

Record No. 0130

Time: 1459 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface in sunlight)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.80	8.00E-01	7.01E+01	7.15E-01
5	580-706	1	0.22	1.10E+00	8.82E+01	7.00E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.27	1.35E+00	9.75E+01	4.71E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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Date: 21 March 1977

Time: 1502 (Pacific Standard)

Site: On Bubbs Creek below East Vidette, in Forest
Measurement by: Dozier

Altitude: 3133 m (10280 ft)

Latitude: +36,44,20
Longitude: -118,22,55

Record No. 0131

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface in shade)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.24	4.80E-02	4.20E+00	4.29E-02
5	580-706	25	0.26	5.20E-02	4.16E+00	3.30E-02
6	687-819	25	0.38	7.60E-02	5.70E+00	4.32E-02
7	767-974	25	0.52	1.04E-01	7.49E+00	3.62E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 22 March 1977

Time: 1020 (Pacific Standard)

Site: Camp below Vidette Meadow, in Forest

Measurement by: Dozier

Altitude: 2950 m (9680 ft)

Latitude: +36,45,41

Longitude: -118,24,23

Record No. 0132

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.45E+02	1.47E+00
5	580-706	1	0.49	2.45E+00	1.96E+02	1.56E+00
6	687-819	1	0.44	2.20E+00	1.65E+02	1.25E+00
7	767-974	1	0.64	3.20E+00	2.31E+02	1.12E+00

Record No. 0133

Time: 1022 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	9.64E+01	9.83E-01
5	580-706	1	0.32	1.60E+00	1.28E+02	1.02E+00
6	687-819	1	0.28	1.40E+00	1.05E+02	7.95E-01
7	767-974	1	0.38	1.90E+00	1.37E+02	6.63E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 22 March 1977

Time: 1025 (Pacific Standard)

Site: Camp below Vidette Meadow, in Forest

Measurement by: Dozier

Altitude: 2950 m (9680 ft)

Latitude: +36,45,41

Longitude: -118,24,23

Record No. 0134

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.36	7.20E-02	6.30E+00	6.43E-02
5	580-706	25	0.53	1.06E-01	8.48E+00	6.73E-02
6	687-819	25	0.84	1.68E-01	1.26E+01	9.55E-02
7	767-974	5	0.30	3.00E-01	2.17E+01	1.05E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 22 March 1977

Time: 1254 (Pacific Standard)

Site: Middle of Bullfrog Lake

Measurement by: Dozier

Altitude: 3230 m (10600 ft)

Latitude: +36,46,17

Longitude: -118,24,09

Record No. 0135

2 Pi Steradian Field of View (Diffuser)
(Surface normal to Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.62E+02	1.65E+00
5	580-706	1	0.51	2.55E+00	2.05E+02	1.62E+00
6	687-819	1	0.47	2.35E+00	1.76E+02	1.34E+00
7	767-974	1	0.64	3.20E+00	2.31E+02	1.12E+00

Record No. 0136

Time: 1256 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.14E+02	1.16E+00
5	580-706	1	0.34	1.70E+00	1.36E+02	1.08E+00
6	687-819	1	0.30	1.50E+00	1.12E+02	8.52E-01
7	767-974	1	0.39	1.95E+00	1.41E+02	6.80E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 22 March 1977

Time: 1258 (Pacific Standard)

Site: Middle of Bullfrog Lake
Measurement by: Dozier

Altitude: 3230 m (10600 ft)

Latitude: +36,46,17

Longitude: -118,24,09

Record No. 0137

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.76E+01	8.94E-01
5	580-706	1	0.27	1.35E+00	1.08E+02	8.59E-01
6	687-819	1	0.24	1.20E+00	9.00E+01	6.82E-01
7	767-974	1	0.26	1.30E+00	9.39E+01	4.53E-01

Record No. 0138

Time: 1300 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from Sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.21	2.10E-01	1.84E+01	1.88E-01
5	580-706	5	0.25	2.50E-01	2.00E+01	1.59E-01
6	687-819	5	0.22	2.20E-01	1.65E+01	1.25E-01
7	767-974	5	0.25	2.50E-01	1.80E+01	8.72E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 22 March 1977

Time: 1517 (Pacific Standard)

Site: Kearsarge Pass Summit
Measurement by: Dozier

Altitude: 3603 m (11823 ft)

Latitude: +36,46,22
Longitude: -118,22,32

Record No. 0139

2 Pi Steradian Field of View (Diffuser)
(Very thick clouds, 8/10, horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.81	1.62E-01	1.42E+01	1.45E-01
5	580-706	5	0.21	2.10E-01	1.68E+01	1.34E-01
6	687-819	25	0.82	1.64E-01	1.23E+01	9.32E-02
7	767-974	5	0.20	2.00E-01	1.44E+01	6.98E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1025 (Pacific Standard)

Site: Mammoth Mountain Parking Lot
Measurement by: Frew, Tara

Altitude: 2731 m (8960 ft)

Latitude: +37,39,07
Longitude: -119,02,07

Record No. 0140

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.62E+02	1.65E+00
5	580-706	1	0.43	2.15E+00	1.72E+02	1.37E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0141

Time: 1030 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.24	2.40E-01	2.10E+01	2.15E-01
5	580-706	1	0.20	1.00E+00	8.02E+01	6.37E-01
7	767-974	1	0.21	1.05E+00	7.58E+01	3.66E-01

Record No. 0142

Time: 1036 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.45E+02	1.47E+00
5	580-706	1	0.40	2.00E+00	1.60E+02	1.27E+00
7	767-974	1	0.38	1.90E+00	1.37E+02	6.63E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1038 (Pacific Standard)

Site: Mammoth Mountain Parking Lot
Measurement by: Frew, Tara

Altitude: 2731 m (8960 ft)

Latitude: +37,39,07

Longitude: -119,02,07

Record No. 0143

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.74	1.48E-01	1.29E+01	1.32E-01
5	580-706	5	0.20	2.00E-01	1.60E+01	1.27E-01
7	767-974	5	0.29	2.90E-01	2.09E+01	1.01E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1233 (Pacific Standard)

Site: Mammoth Mountain, Top of Broadway
Measurement by: Frew, Tara

Altitude: 2926 m (9600 ft)

Latitude: +37,38,35
Longitude: -119,01,59

Record No. 0144

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- thin clouds, light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.88E+01	8.04E-01
5	580-706	1	0.26	1.30E+00	1.04E+02	8.27E-01
6	687-819	1	0.21	1.05E+00	7.87E+01	5.97E-01
7	767-974	1	0.32	1.60E+00	1.16E+02	5.58E-01

Record No. 0145

Time: 1236 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- thin clouds, light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.64	6.40E-01	5.61E+01	5.72E-01
5	580-706	5	0.82	8.20E-01	6.58E+01	5.22E-01
6	687-819	5	0.65	6.50E-01	4.87E+01	3.69E-01
7	767-974	1	0.20	1.00E+00	7.22E+01	3.49E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1237 (Pacific Standard)

Site: Mammoth Mountain, Top of Broadway
Measurement by: Frew, Tara

Altitude: 2926 m (9600 ft)

Latitude: +37,38,35
Longitude: -119,01,59

Record No. 0146

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- thin clouds, light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.80	8.00E-01	7.01E+01	7.15E-01
5	580-706	1	0.22	1.10E+00	8.82E+01	7.00E-01
6	687-819	1	0.19	9.50E-01	7.12E+01	5.40E-01
7	767-974	1	0.26	1.30E+00	9.39E+01	4.53E-01

Record No. 0147

Time: 1239 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.42	4.20E-01	3.68E+01	3.75E-01
5	580-706	5	0.56	5.60E-01	4.49E+01	3.56E-01
6	687-819	5	0.61	6.10E-01	4.57E+01	3.47E-01
7	767-974	5	0.62	6.20E-01	4.48E+01	2.16E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1241 (Pacific Standard)

Site: Mammoth Mountain, Top of Broadway
Measurement by: Frew, Tara

Altitude: 2926 m (9600 ft)

Latitude: +37,38,35

Longitude: -119,01,59

Record No. 0148

2 Pi Steradian Field of View (Diffuser)
(Normal to slope -- thin clouds, light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.78	7.80E-01	6.83E+01	6.97E-01
5	580-706	1	0.20	1.00E+00	8.02E+01	6.37E-01
6	687-819	5	0.75	7.50E-01	5.63E+01	4.26E-01
7	767-974	1	0.21	1.05E+00	7.58E+01	3.66E-01

Record No. 0149

Time: 1243 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.49	4.90E-01	4.29E+01	4.38E-01
5	580-706	5	0.61	6.10E-01	4.89E+01	3.88E-01
6	687-819	5	0.59	5.90E-01	4.42E+01	3.35E-01
7	767-974	5	0.59	5.90E-01	4.26E+01	2.06E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1323 (Pacific Standard)

Site: Mammoth Mountain, Halfway down Broadway
Measurement by: Frew, Tara

Altitude: 2852 m (9360 ft)

Latitude: +37,38,45
Longitude: -119,01,57

Record No. 0150

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- cloud cover unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.40	2.00E+00	1.75E+02	1.79E+00
5	580-706	1	0.23	1.15E+00	9.22E+01	7.32E-01
6	687-819	1	0.22	1.10E+00	8.25E+01	6.25E-01
7	767-974	1	0.18	9.00E-01	6.50E+01	3.14E-01

Record No. 0151

Time: 1324 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- cloud cover unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.19	9.50E-01	8.32E+01	8.49E-01
5	580-706	5	0.58	5.80E-01	4.65E+01	3.69E-01
6	687-819	5	0.44	4.40E-01	3.30E+01	2.50E-01
7	767-974	5	0.74	7.40E-01	5.34E+01	2.58E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1325 (Pacific Standard)

Site: Mammoth Mountain, Halfway down Broadway
Measurement by: Frew, Tara

Altitude: 2852 m (9360 ft)

Latitude: +37,38,45

Longitude: -119,01,57

Record No. 0152

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- cloud cover unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.19	9.50E-01	7.62E+01	6.05E-01
6	687-819	5	0.64	6.40E-01	4.80E+01	3.64E-01
7	767-974	5	0.88	8.80E-01	6.35E+01	3.07E-01

Record No. 0153

Time: 1326 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.85	8.50E-01	7.45E+01	7.60E-01
5	580-706	5	0.42	4.20E-01	3.37E+01	2.67E-01
6	687-819	5	0.40	4.00E-01	3.00E+01	2.27E-01
7	767-974	5	0.43	4.30E-01	3.10E+01	1.50E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1327 (Pacific Standard)

Site: Mammoth Mountain, Halfway down Broadway

Measurement by: Frew, Tara

Altitude: 2852 m (9360 ft)

Latitude: +37,38,45

Longitude: -119,01,57

Record No. 0154

2 Pi Steradian Field of View (Diffuser)
(Normal to slope -- cloud cover unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.05E+02	1.07E+00
5	580-706	5	0.76	7.60E-01	6.10E+01	4.84E-01
6	687-819	1	0.22	1.10E+00	8.25E+01	6.25E-01
7	767-974	5	0.73	7.30E-01	5.27E+01	2.55E-01

Record No. 0155

Time: 1328 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.58	5.80E-01	5.08E+01	5.18E-01
5	580-706	5	0.50	5.00E-01	4.01E+01	3.18E-01
6	687-819	5	0.45	4.50E-01	3.37E+01	2.56E-01
7	767-974	5	0.42	4.20E-01	3.03E+01	1.46E-01

87

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1543 (Pacific Standard)

Site: Mammoth Mountain, Top No. 2 Chairlift
Measurement by: Frew, Tara

Altitude: 2919 m (9580 ft)

Latitude: +37,38,38
Longitude: -119,01,46

Record No. 0156

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- cloud cover unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.58E+02	1.61E+00
5	580-706	1	0.36	1.80E+00	1.44E+02	1.15E+00
6	687-819	1	0.38	1.90E+00	1.42E+02	1.08E+00
7	767-974	5	0.68	6.80E-01	4.91E+01	2.37E-01

Record No. 0157

Time: 1545 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- cloud cover unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.84	1.68E-01	1.47E+01	1.50E-01
5	580-706	5	0.19	1.90E-01	1.52E+01	1.21E-01
6	687-819	5	0.24	2.40E-01	1.80E+01	1.36E-01
7	767-974	25	0.88	1.76E-01	1.27E+01	6.12E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 April 1977

Time: 1546 (Pacific Standard)

Site: Mammoth Mountain, Top No. 2 Chairlift
Measurement by: Frew, Tara

Altitude: 2919 m (9580 ft)

Latitude: +37,38,38
Longitude: -119,01,46

Record No. 0158

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- cloud cover unknown)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.72	7.20E-01	6.31E+01	6.44E-01
5	580-706	5	0.76	7.60E-01	6.10E+01	4.84E-01
6	687-819	1	0.14	7.00E-01	5.25E+01	3.98E-01
7	767-974	5	0.38	3.80E-01	2.74E+01	1.33E-01

Record No. 0159

Time: 1547 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.46	4.60E-01	4.03E+01	4.11E-01
5	580-706	5	0.42	4.20E-01	3.37E+01	2.67E-01
6	687-819	5	0.40	4.00E-01	3.00E+01	2.27E-01
7	767-974	5	0.30	3.00E-01	2.17E+01	1.05E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1107 (Pacific Standard)

Site: Mammoth Mountain, Top Daves Run

Measurement by: Frew, Tara

Altitude: 3328 m (10920 ft)

Latitude: +37,37,42

Longitude: -119,01,50

Record No. 0160

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.45E+02	1.47E+00
5	580-706	1	0.50	2.50E+00	2.01E+02	1.59E+00
6	687-819	1	0.43	2.15E+00	1.61E+02	1.22E+00
7	767-974	1	0.61	3.05E+00	2.20E+02	1.06E+00

Record No. 0161

Time: 1110 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.60	6.00E-01	5.26E+01	5.36E-01
5	580-706	1	0.30	1.50E+00	1.20E+02	9.55E-01
6	687-819	1	0.23	1.15E+00	8.62E+01	6.53E-01
7	767-974	1	0.23	1.15E+00	8.30E+01	4.01E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1112 (Pacific Standard)

Site: Mammoth Mountain, Top Daves Run
Measurement by: Frew, Tara

Altitude: 3328 m (10920 ft)

Latitude: +37,37,42
Longitude: -119,01,50

Record No. 0162

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.05E+02	1.07E+00
5	580-706	1	0.41	2.05E+00	1.64E+02	1.30E+00
6	687-819	1	0.33	1.65E+00	1.24E+02	9.37E-01
7	767-974	1	0.43	2.15E+00	1.55E+02	7.50E-01

Record No. 0163

Time: 1114 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.82	8.20E-01	7.18E+01	7.33E-01
5	580-706	1	0.21	1.05E+00	8.42E+01	6.68E-01
6	687-819	5	0.82	8.20E-01	6.15E+01	4.66E-01
7	767-974	1	0.20	1.00E+00	7.22E+01	3.49E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1116 (Pacific Standard)

Site: Mammoth Mountain, Top Daves Run
Measurement by: Frew, Tara

Altitude: 3328 m (10920 ft)

Latitude: +37,37,42

Longitude: -119,01,50

Record No. 0164

2 Pi Steradian Field of View (Diffuser)
(Normal to slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.21	1.05E+00	9.20E+01	9.39E-01
5	580-706	1	0.32	1.60E+00	1.28E+02	1.02E+00
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.14	7.00E-01	5.05E+01	2.44E-01

Record No. 0165

Time: 1118 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.81	8.10E-01	7.10E+01	7.24E-01
6	687-819	1	0.21	1.05E+00	7.87E+01	5.97E-01
6	687-819	1	0.14	7.00E-01	5.25E+01	3.98E-01
7	767-974	1	0.30	1.50E+00	1.08E+02	5.23E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1250 (Pacific Standard)

Site: Mammoth Mountain, Midway
Measurement by: Frew, Tara

Altitude: 2938 m (9640 ft)

Latitude: +37,38,32
Longitude: -119,01,42

Record No. 0166

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.38	1.90E+00	1.66E+02	1.70E+00
5	580-706	1	0.52	2.60E+00	2.09E+02	1.65E+00
6	687-819	1	0.46	2.30E+00	1.72E+02	1.31E+00
7	767-974	1	0.64	3.20E+00	2.31E+02	1.12E+00

Record No. 0167

Time: 1253 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.74	7.40E-01	6.48E+01	6.61E-01
5	580-706	1	0.18	9.00E-01	7.22E+01	5.73E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.20	1.00E+00	7.22E+01	3.49E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1256 (Pacific Standard)

Site: Mammoth Mountain, Midway
Measurement by: Frew, Tara

Altitude: 2938 m (9640 ft)

Latitude: +37,38,32
Longitude: -119,01,42

Record No. 0168

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.30	1.50E+00	1.31E+02	1.34E+00
5	580-706	1	0.42	2.10E+00	1.68E+02	1.34E+00
6	687-819	1	0.33	1.65E+00	1.24E+02	9.37E-01
7	767-974	1	0.42	2.10E+00	1.52E+02	7.32E-01

Record No. 0169

Time: 1258 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.22	2.20E-01	1.93E+01	1.97E-01
5	580-706	5	0.40	4.00E-01	3.21E+01	2.55E-01
6	687-819	5	0.38	3.80E-01	2.85E+01	2.16E-01
7	767-974	5	0.52	5.20E-01	3.75E+01	1.81E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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Date: 14 April 1977

Time: 1300 (Pacific Standard)

Site: Mammoth Mountain, Midway

Measurement by: Frew, Tara

Altitude: 2938 m (9640 ft)

Latitude: +37,38,32

Longitude: -119,01,42

Record No. 0170

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.80	8.00E-01	7.01E+01	7.15E-01
5	580-706	1	0.22	1.10E+00	8.82E+01	7.00E-01
6	687-819	1	0.18	9.00E-01	6.75E+01	5.11E-01
7	767-974	1	1.00	5.00E+00	3.61E+02	1.74E+00

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1347 (Pacific Standard)

Site: Above Parking Lot on Minaret Summit Road
Measurement by: Frew, Tara

Altitude: 2731 m (8960 ft)

Latitude: +37,39,03
Longitude: -119,02,25

Record No. 0171

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.36E+02	1.39E+00
5	580-706	1	0.46	2.30E+00	1.84E+02	1.46E+00
6	687-819	1	0.42	2.10E+00	1.57E+02	1.19E+00
7	767-974	1	0.56	2.80E+00	2.02E+02	9.77E-01

Record No. 0172

Time: 1348 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.42	8.40E-02	7.35E+00	7.50E-02
5	580-706	25	0.45	9.00E-02	7.20E+00	5.71E-02
6	687-819	25	0.68	1.36E-01	1.02E+01	7.73E-02
7	767-974	5	0.21	2.10E-01	1.52E+01	7.32E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1349 (Pacific Standard)

Site: Above Parking Lot on Minaret Summit Road

Measurement by: Frew, Tara

Altitude: 2731 m (8960 ft)

Latitude: +37,39,03

Longitude: -119,02,25

Record No. 0173

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.62	6.20E-01	5.43E+01	5.54E-01
5	580-706	5	0.82	8.20E-01	6.58E+01	5.22E-01
6	687-819	5	0.84	8.40E-01	6.30E+01	4.77E-01
7	767-974	1	0.21	1.05E+00	7.58E+01	3.66E-01

Record No. 0174

Time: 1350 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection frcm ?)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.46	4.60E-01	4.03E+01	4.11E-01
5	580-706	5	0.67	6.70E-01	5.37E+01	4.26E-01
6	687-819	5	0.60	6.00E-01	4.50E+01	3.41E-01
7	767-974	5	0.75	7.50E-01	5.41E+01	2.62E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 April 1977

Time: 1351 (Pacific Standard)

Site: Above Parking Lot on Minaret Summit Road
Measurement by: Frew, Tara

Altitude: 2731 m (8960 ft)

Latitude: +37,39,03
Longitude: -119,02,25

Record No. 0175

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun, in shade)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.24	4.80E-02	4.20E+00	4.29E-02
5	580-706	25	0.32	6.40E-02	5.12E+00	4.06E-02
6	687-819	25	0.45	9.00E-02	6.75E+00	5.11E-02
7	767-974	5	0.20	2.00E-01	1.44E+01	6.98E-02

Record No. 0176

Time: 1352 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun, in shade)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.29	5.80E-02	5.07E+00	5.18E-02
5	580-706	25	0.32	6.40E-02	5.12E+00	4.06E-02
6	687-819	25	0.71	1.42E-01	1.06E+01	8.07E-02
7	767-974	5	0.22	2.20E-01	1.59E+01	7.67E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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Date: 14 April 1977

Time: 1353 (Pacific Standard)

Site: Above Parking Lot on Minaret Summit Road
Measurement by: Frew, Tara

Altitude: 2731 m (8960 ft)

Latitude: +37,39,03
Longitude: -119,02,25

Record No. 0177

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface, in shade)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.25	5.00E-02	4.38E+00	4.46E-02
5	580-706	25	0.31	6.20E-02	4.96E+00	3.94E-02
6	687-819	25	0.45	9.00E-02	6.75E+00	5.11E-02
7	767-974	25	0.66	1.32E-01	9.50E+00	4.59E-02

Record No. 0178

Time: 1354 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from ?, in shade)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.92	1.84E-01	1.61E+01	1.64E-01
5	580-706	5	0.24	2.40E-01	1.92E+01	1.53E-01
6	687-819	5	0.24	2.40E-01	1.80E+01	1.36E-01
7	767-974	5	0.31	3.10E-01	2.24E+01	1.08E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 0931 (Pacific Standard)

Site: Big Whitney Meadow, North End
Measurement by: Crabtree et al

Altitude: 2973 m (9755 ft)

Latitude: +36,26,41
Longitude: -118,16,07

Record No. 0179

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.52	2.60E+00	2.09E+02	1.65E+00
6	687-819	1	0.48	2.40E+00	1.80E+02	1.36E+00
7	767-974	1	0.68	3.40E+00	2.45E+02	1.19E+00

Record No. 0180

Time: 0933 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- light clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.44	4.40E-01	3.85E+01	3.93E-01
5	580-706	5	0.54	5.40E-01	4.33E+01	3.44E-01
6	687-819	5	0.50	5.00E-01	3.75E+01	2.84E-01
7	767-974	5	0.64	6.40E-01	4.62E+01	2.23E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 0934 (Pacific Standard)

Site: Big Whitney Meadow, North End
Measurement by: Crabtree et al

Altitude: 2973 m (9755 ft)

Latitude: +36,26,41
Longitude: -118,16,07

Record No. 0181

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- light clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.44	4.40E-01	3.85E+01	3.93E-01
5	580-706	5	0.70	7.00E-01	5.61E+01	4.46E-01
6	687-819	5	0.56	5.60E-01	4.20E+01	3.18E-01
7	767-974	5	0.64	6.40E-01	4.62E+01	2.23E-01

Record No. 0182

Time: 0935 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt -- sunlight)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.50	1.00E-01	8.75E+00	8.93E-02
5	580-706	25	0.58	1.16E-01	9.28E+00	7.37E-02
6	687-819	25	0.68	1.36E-01	1.02E+01	7.73E-02
7	767-974	5	0.30	3.00E-01	2.17E+01	1.05E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 0935 (Pacific Standard)

Site: Big Whitney Meadow, North End
Measurement by: Crabtree et al

Altitude: 2973 m (9755 ft)

Latitude: +36,26,41
Longitude: -118,16,07

Record No. 0183

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt -- light clouds over sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.36	7.20E-02	6.30E+00	6.43E-02
5	580-706	25	0.52	1.04E-01	8.32E+00	6.60E-02
6	687-819	25	0.56	1.12E-01	8.40E+00	6.36E-02
7	767-974	25	0.82	1.64E-01	1.18E+01	5.70E-02

Record No. 0184

Time: 0937 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.26	2.60E-01	2.28E+01	2.32E-01
5	580-706	5	0.38	3.80E-01	3.05E+01	2.42E-01
6	687-819	5	0.38	3.80E-01	2.85E+01	2.16E-01
7	767-974	5	0.50	5.00E-01	3.61E+01	1.74E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 0958 (Pacific Standard)

Site: Big Whitney Meadow, North Central
Measurement by: Crabtree et al

Altitude: 2970 m (9745 ft)

Latitude: +36,26,35

Longitude: -118,16,04

Record No. 0185

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- light 8/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.68	6.80E-01	5.96E+01	6.08E-01
5	580-706	5	0.90	9.00E-01	7.22E+01	5.73E-01
6	687-819	5	0.88	8.80E-01	6.60E+01	5.00E-01
7	767-974	1	0.20	1.00E+00	7.22E+01	3.49E-01

Record No. 0186

Time: 1000 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- light 8/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.80	8.00E-01	7.01E+01	7.15E-01
5	580-706	1	0.20	1.00E+00	8.02E+01	6.37E-01
6	687-819	5	0.87	8.70E-01	6.52E+01	4.94E-01
7	767-974	1	0.20	1.00E+00	7.22E+01	3.49E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 1003 (Pacific Standard)

Site: Big Whitney Meadow, North Central

Measurement by: Crabtree et al

Altitude: 2970 m (9745 ft)

Latitude: +36,26,35

Longitude: -118,16,04

Record No. 0187

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.35	7.00E-02	6.12E+00	6.25E-02
5	580-706	25	0.56	1.12E-01	8.96E+00	7.11E-02
6	687-819	25	0.73	1.46E-01	1.09E+01	8.30E-02
7	767-974	5	0.20	2.00E-01	1.44E+01	6.98E-02

Record No. 0188

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.48	4.80E-01	4.20E+01	4.29E-01
5	580-706	5	0.57	5.70E-01	4.57E+01	3.63E-01
6	687-819	5	0.49	4.90E-01	3.67E+01	2.78E-01
7	767-974	5	0.53	5.30E-01	3.83E+01	1.85E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 1006 (Pacific Standard)

Site: Big Whitney Meadow, North Central
Measurement by: Crabtree et al

Altitude: 2970 m (9745 ft)

Latitude: +36,26,35
Longitude: -118,16,04

Record No. 0189

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- light 8/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.38	3.80E-01	3.33E+01	3.40E-01
5	580-706	5	0.53	5.30E-01	4.25E+01	3.37E-01
6	687-819	5	0.50	5.00E-01	3.75E+01	2.84E-01
7	767-974	5	0.63	6.30E-01	4.55E+01	2.20E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 1020 (Pacific Standard)

Site: Edge of Big Whitney Meadow, 15° SE Slope
Measurement by: Crabtree et al

Altitude: 2980 m (9780 ft)

Latitude: +36,26,35
Longitude: -118,16,11

Record No. 0190

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- 7/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.62	6.20E-01	5.43E+01	5.54E-01
5	580-706	5	0.80	8.00E-01	6.42E+01	5.09E-01
6	687-819	5	0.70	7.00E-01	5.25E+01	3.98E-01
7	767-974	5	0.89	8.90E-01	6.43E+01	3.10E-01

Record No. 0191

Time: 1022 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- 7/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.71	7.10E-01	6.22E+01	6.35E-01
5	580-706	5	0.82	8.20E-01	6.58E+01	5.22E-01
6	687-819	5	0.80	8.00E-01	6.00E+01	4.55E-01
7	767-974	5	0.91	9.10E-01	6.57E+01	3.17E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 24 April 1977

Time: 1025 (Pacific Standard)

Site: Edge of Big Whitney Meadow, 15° SE Slope

Measurement by: Crabtree et al

Altitude: 2980 m (9780 ft)

Latitude: +36,26,35

Longitude: -118,16,11

Record No. 0192

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.30	6.00E-02	5.25E+00	5.36E-02
5	580-706	25	0.49	9.80E-02	7.84E+00	6.22E-02
5	580-706	25	0.58	1.16E-01	9.28E+00	7.37E-02
7	767-974	25	0.81	1.62E-01	1.17E+01	5.63E-02

Record No. 0193

Time: 1030 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- 7/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.46	4.60E-01	4.03E+01	4.11E-01
5	580-706	5	0.60	6.00E-01	4.81E+01	3.82E-01
6	687-819	5	0.52	5.20E-01	3.90E+01	2.95E-01
7	767-974	5	0.69	6.90E-01	4.98E+01	2.41E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 0815 (Pacific Standard)

Site: Rock Creek Lake

Measurement by: Sherry et al

Altitude: 3182 m (10440 ft)

Latitude: +36,29,44

Longitude: -118,16,59

Record No. 0194

2 Pi Steradian Field of View (Diffuser)

(Surface normal to sun -- hazy high clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.36E+02	1.39E+00
5	580-706	1	0.44	2.20E+00	1.76E+02	1.40E+00
6	687-819	1	0.42	2.10E+00	1.57E+02	1.19E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0195

Time: 0817 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(On horizontal surface -- hazy high clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.88E+01	8.04E-01
5	580-706	1	0.24	1.20E+00	9.62E+01	7.64E-01
6	687-819	1	0.23	1.15E+00	8.62E+01	6.53E-01
7	767-974	1	0.27	1.35E+00	9.75E+01	4.71E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 0819 (Pacific Standard)

Site: Rock Creek Lake

Measurement by: Sherry et al

Altitude: 3182 m (10440 ft)

Latitude: +36,29,44

Longitude: -118,16,59

Record No. 0196

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal grass surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.43	8.60E-02	7.52E+00	7.68E-02
5	580-706	25	0.77	1.54E-01	1.23E+01	9.78E-02
6	687-819	5	0.18	1.80E-01	1.35E+01	1.02E-01
7	767-974	5	0.28	2.80E-01	2.02E+01	9.77E-02

Record No. 0197

Time: 0821 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- hazy high clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.56	1.12E-01	9.80E+00	1.00E-01
5	580-706	25	0.57	1.14E-01	9.12E+00	7.24E-02
6	687-819	25	0.77	1.54E-01	1.15E+01	8.75E-02
7	767-974	5	0.18	1.80E-01	1.30E+01	6.28E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 0825 (Pacific Standard)

Site: Rock Creek Lake

Measurement by: Sherry et al

Altitude: 3182 m (10440 ft)

Latitude: +36,29,44

Longitude: -118,16,59

Record No. 0198

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.54	5.40E-01	4.73E+01	4.83E-01
5	580-706	5	0.74	7.40E-01	5.93E+01	4.71E-01
6	687-819	5	0.69	6.90E-01	5.17E+01	3.92E-01
7	767-974	5	0.76	7.60E-01	5.49E+01	2.65E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 0940 (Pacific Standard)

Site: Camp Below Rock Creek Lake

Measurement by: Sherry et al

Altitude: 3172 m (10410 ft)

Latitude: +36,29,40

Longitude: -118,17,00

Record No. 0199

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.58E+02	1.61E+00
5	580-706	1	0.50	2.50E+00	2.01E+02	1.59E+00
6	687-819	1	0.44	2.20E+00	1.65E+02	1.25E+00
7	767-974	1	0.61	3.05E+00	2.20E+02	1.06E+00

Record No. 0200

Time: 0942 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.05E+02	1.07E+00
5	580-706	1	0.36	1.80E+00	1.44E+02	1.15E+00
6	687-819	1	0.32	1.60E+00	1.20E+02	9.09E-01
7	767-974	1	0.41	2.05E+00	1.48E+02	7.15E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 0943 (Pacific Standard)

Site: Camp Below Rock Creek Lake
Measurement by: Sherry et al

Altitude: 3172 m (10410 ft)

Latitude: +36,29,40
Longitude: -118,17,00

Record No. 0201

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.25	2.50E-01	2.19E+01	2.23E-01
5	580-706	5	0.32	3.20E-01	2.57E+01	2.04E-01
6	687-819	5	0.34	3.40E-01	2.55E+01	1.93E-01
7	767-974	5	0.40	4.00E-01	2.89E+01	1.40E-01

Record No. 0202

Time: 0945 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.63	1.26E-01	1.10E+01	1.12E-01
5	580-706	5	0.16	1.60E-01	1.28E+01	1.02E-01
6	687-819	5	0.19	1.90E-01	1.42E+01	1.08E-01
7	767-974	5	0.28	2.80E-01	2.02E+01	9.77E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 0945 (Pacific Standard)

Site: Camp Below Rock Creek Lake
Measurement by: Sherry et al

Altitude: 3172 m (10410 ft)

Latitude: +36,29,40
Longitude: -118,17,00

Record No. 0203

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Eand</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.70	7.00E-01	6.13E+01	6.26E-01
5	580-706	5	0.88	8.80E-01	7.06E+01	5.60E-01
6	687-819	5	0.74	7.40E-01	5.55E+01	4.20E-01
7	767-974	5	0.82	8.20E-01	5.92E+01	2.86E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 1116 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Sherry et al

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38
Longitude: -118,16,24

Record No. 0204

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.49	2.45E+00	1.96E+02	1.56E+00
6	687-819	1	0.43	2.15E+00	1.61E+02	1.22E+00
7	767-974	1	0.61	3.05E+00	2.20E+02	1.06E+00

Record No. 0205

Time: 1118 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.36E+02	1.39E+00
5	580-706	1	0.41	2.05E+00	1.64E+02	1.30E+00
6	687-819	1	0.39	1.95E+00	1.46E+02	1.11E+00
7	767-974	1	0.49	2.45E+00	1.77E+02	8.55E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 1120 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Sherry et al

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38

Longitude: -118,16,24

Record No. 0206

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.40	4.00E-01	3.50E+01	3.58E-01
5	580-706	5	0.67	6.70E-01	5.37E+01	4.26E-01
6	687-819	5	0.69	6.90E-01	5.17E+01	3.92E-01
7	767-974	5	0.88	8.80E-01	6.35E+01	3.07E-01

Record No. 0207

Time: 1121 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.59	1.18E-01	1.03E+01	1.05E-01
5	580-706	25	0.98	1.96E-01	1.57E+01	1.24E-01
6	687-819	5	0.21	2.10E-01	1.57E+01	1.19E-01
7	767-974	5	0.32	3.20E-01	2.31E+01	1.12E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 1123 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Sherry et al

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38
Longitude: -118,16,24

Record No. 0208

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.90	9.00E-01	7.88E+01	8.04E-01
5	580-706	1	0.20	1.00E+00	8.02E+01	6.37E-01
6	687-819	1	0.19	9.50E-01	7.12E+01	5.40E-01
7	767-974	1	0.19	9.50E-01	6.86E+01	3.31E-01

Record No. 0209

Time: 1255 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.39	1.95E+00	1.71E+02	1.74E+00
5	580-706	1	0.55	2.75E+00	2.21E+02	1.75E+00
6	687-819	1	0.50	2.50E+00	1.88E+02	1.42E+00
7	767-974	1	0.69	3.45E+00	2.49E+02	1.20E+00

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 1257 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails

Measurement by: Sherry et al

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38

Longitude: -118,16,24

Record No. 0210

2 Pi Steradian Field of View (Diffuser)

(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.59	5.90E-01	5.17E+01	5.27E-01
5	580-706	5	0.65	6.50E-01	5.21E+01	4.14E-01
6	687-819	5	0.85	8.50E-01	6.37E+01	4.83E-01
7	767-974	1	0.26	1.30E+00	9.39E+01	4.53E-01

Record No. 0211

Time: 1259 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.05E+02	1.07E+00
5	580-706	1	0.32	1.60E+00	1.28E+02	1.02E+00
6	687-819	1	0.39	1.95E+00	1.46E+02	1.11E+00
7	767-974	1	0.50	2.50E+00	1.81E+02	8.72E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 1300 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Sherry et al

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38

Longitude: -118,16,24

Record No. 0212

2 Pi Steradian Field of View (Diffuser)
(Reflection from dirt)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.17	1.70E-01	1.49E+01	1.52E-01
5	580-706	5	0.26	2.60E-01	2.09E+01	1.65E-01
6	687-819	5	0.33	3.30E-01	2.47E+01	1.87E-01
7	767-974	5	0.45	4.50E-01	3.25E+01	1.57E-01

Record No. 0213

Time: 1302 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.80	8.00E-01	7.01E+01	7.15E-01
5	580-706	1	0.19	9.50E-01	7.62E+01	6.05E-01
6	687-819	1	0.17	8.50E-01	6.37E+01	4.83E-01
7	767-974	1	0.19	9.50E-01	6.86E+01	3.31E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 1530 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails
Measurement by: Sherry et al

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38
Longitude: -118,16,24

Record No. 0214

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.30	1.50E+00	1.31E+02	1.34E+00
5	580-706	1	0.41	2.05E+00	1.64E+02	1.30E+00
6	687-819	1	0.39	1.95E+00	1.46E+02	1.11E+00
7	767-974	1	0.51	2.55E+00	1.84E+02	8.89E-01

Record No. 0215

Time: 1532 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.71	1.42E-01	1.24E+01	1.27E-01
5	580-706	25	0.79	1.58E-01	1.26E+01	1.00E-01
6	687-819	5	0.20	2.00E-01	1.50E+01	1.14E-01
7	767-974	5	0.22	2.20E-01	1.59E+01	7.67E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 25 April 1977

Time: 1536 (Pacific Standard)

Site: Junction Siberian Pass/Army Pass Trails

Measurement by: Sherry et al

Altitude: 3300 m (10830 ft)

Latitude: +36,29,38

Longitude: -118,16,24

Record No. 0218

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.60	6.00E-01	5.26E+01	5.36E-01
5	580-706	5	0.80	8.00E-01	6.42E+01	5.09E-01
6	687-819	5	0.79	7.90E-01	5.92E+01	4.49E-01
7	767-974	5	0.89	8.90E-01	6.43E+01	3.10E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 0740 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake

Measurement by: Dozier

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0219

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.54	5.40E-01	4.67E+01	4.77E-01
5	580-706	5	0.62	6.20E-01	5.29E+01	4.20E-01
6	687-819	5	0.54	5.40E-01	4.16E+01	3.15E-01
7	767-974	5	0.69	6.90E-01	5.00E+01	2.42E-01

Record No. 0220

Time: 0742 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.46	4.60E-01	3.98E+01	4.06E-01
5	580-706	5	0.54	5.40E-01	4.61E+01	3.66E-01
6	687-819	5	0.49	4.90E-01	3.77E+01	2.86E-01
7	767-974	5	0.63	6.30E-01	4.57E+01	2.21E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 0940 (Pacific Standard)

Site: East Shore of Bullfrog Lake
Measurement by: Gunderson, Thomson

Altitude: 3230 m (10600 ft)

Latitude: +36,46,19
Longitude: -118,24,07

Record No. 0221

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- through cloud)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.97	9.70E-01	8.39E+01	8.56E-01
5	580-706	1	0.22	1.10E+00	9.39E+01	7.46E-01

Record No. 0222

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- sun clear)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	9.50E+01	9.70E-01
5	580-706	1	0.26	1.30E+00	1.11E+02	8.81E-01
6	687-819	1	0.23	1.15E+00	8.85E+01	6.71E-01
7	767-974	1	0.30	1.50E+00	1.09E+02	5.25E-01

Record No. 0223

Time: 1042 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.78E+01	7.93E-01
5	580-706	1	0.21	1.05E+00	8.97E+01	7.12E-01
6	687-819	1	0.18	9.00E-01	6.93E+01	5.25E-01
7	767-974	1	0.24	1.20E+00	8.69E+01	4.20E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1042 (Pacific Standard)

Site: East Shore of Bullfrog Lake
Measurement by: Gunderson, Thomson

Altitude: 3230 m (10600 ft)

Latitude: +36,46,19
Longitude: -118,24,07

Record No. 0224

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- sun obscured by cloud)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.13	6.50E-01	5.62E+01	5.73E-01
5	580-706	1	0.15	7.50E-01	6.40E+01	5.08E-01
6	687-819	1	0.13	6.50E-01	5.00E+01	3.79E-01
7	767-974	1	0.16	8.00E-01	5.79E+01	2.80E-01

Record No. 0225

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- sun clear)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.62	6.20E-01	5.36E+01	5.47E-01
5	580-706	5	0.66	6.60E-01	5.64E+01	4.47E-01
6	687-819	5	0.58	5.80E-01	4.47E+01	3.38E-01
7	767-974	5	0.74	7.40E-01	5.36E+01	2.59E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1020 (Pacific Standard)

Site: Small Lake below Bullfrog Lake

Measurement by: Gunderson, Thomson

Altitude: 3224 m (10580 ft)

Latitude: +36,46,12

Longitude: -118,24,28

Record No. 0226

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.42	2.10E+00	1.81E+02	1.85E+00
5	580-706	1	0.50	2.50E+00	2.14E+02	1.69E+00
6	687-819	1	0.44	2.20E+00	1.69E+02	1.28E+00
7	767-974	1	0.60	3.00E+00	2.17E+02	1.05E+00

Record No. 0227

Time: 1022 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.56E+02	1.59E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.38	1.90E+00	1.46E+02	1.11E+00
7	767-974	1	0.49	2.45E+00	1.77E+02	8.57E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1024 (Pacific Standard)

Site: Small Lake below Bullfrog Lake
Measurement by: Gunderson, Thomson

Altitude: 3224 m (10580 ft)

Latitude: +36,46,12
Longitude: -118,24,28

Record No. 0228

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.56	5.60E-01	4.84E+01	4.94E-01
5	580-706	5	0.56	5.60E-01	4.78E+01	3.80E-01
6	687-819	5	0.52	5.20E-01	4.00E+01	3.03E-01
7	767-974	5	0.66	6.60E-01	4.78E+01	2.31E-01

Record No. 0229

Time: 1025 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.12E+02	1.15E+00
5	580-706	1	0.28	1.40E+00	1.20E+02	9.49E-01
6	687-819	1	0.26	1.30E+00	1.00E+02	7.58E-01
7	767-974	1	0.32	1.60E+00	1.16E+02	5.60E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1130 (Pacific Standard)

Site: On South-facing Slope above Vidette Meadow
Measurement by: Gunderson, Thomson

Altitude: 2974 m (9760 ft)

Latitude: +36,45,43

Longitude: -118,24,29

Record No. 0230

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- light clouds, sun unobscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.43	2.15E+00	1.86E+02	1.90E+00
5	580-706	1	0.52	2.60E+00	2.22E+02	1.76E+00
6	687-819	1	0.47	2.35E+00	1.81E+02	1.37E+00
7	767-974	1	0.64	3.20E+00	2.32E+02	1.12E+00

Record No. 0231

Time: 1132 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- light clouds, sun unobscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.38	1.90E+00	1.64E+02	1.68E+00
5	580-706	1	0.46	2.30E+00	1.96E+02	1.56E+00
6	687-819	1	0.42	2.10E+00	1.62E+02	1.22E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1134 (Pacific Standard)

Site: On South-facing Slope above Vidette Meadow

Measurement by: Gunderson, Thomson

Altitude: 2974 m (9760 ft)

Latitude: +36,45,43

Longitude: -118,24,29

Record No. 0232

2 Pi Steradian Field of View (Diffuser)

(Surface away from sun -- light clouds, sun unobscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.12E+02	1.15E+00
5	580-706	1	0.40	2.00E+00	1.71E+02	1.36E+00
6	687-819	1	0.35	1.75E+00	1.35E+02	1.02E+00
7	767-974	1	0.40	2.00E+00	1.45E+02	7.00E-01

Record No. 0233

Time: 1136 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(Reflection from snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	9.50E+01	9.70E-01
5	580-706	1	0.23	1.15E+00	9.82E+01	7.79E-01
6	687-819	1	0.20	1.00E+00	7.70E+01	5.83E-01
7	767-974	1	0.26	1.30E+00	9.41E+01	4.55E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1507 (Pacific Standard)

Site: On Glen Pass Trail above Bullfrog Lake
Measurement by: Dozier

Altitude: 3316 m (10880 ft)

Latitude: +36,46,24

Longitude: -118,24,32

Record No. 0234

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- through thin clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.21	1.05E+00	9.07E+01	9.26E-01
5	580-706	1	0.23	1.15E+00	9.82E+01	7.79E-01
6	687-819	1	0.21	1.05E+00	8.08E+01	6.12E-01
7	767-974	1	0.29	1.45E+00	1.05E+02	5.07E-01

Record No. 0235

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- sun unobscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.46	2.30E+00	1.99E+02	2.03E+00
5	580-706	1	0.58	2.90E+00	2.48E+02	1.97E+00
6	687-819	1	0.50	2.50E+00	1.93E+02	1.46E+00
7	767-974	1	0.67	3.35E+00	2.43E+02	1.17E+00

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977 Time: 1509 (Pacific Standard)

Site: On Glen Pass Trail above Bullfrog Lake
Measurement by: Dozier

Altitude: 3316 m (10880 ft) Latitude: +36,46,24
Longitude: -118,24,32

Record No. 0236

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- sun unobscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.34	1.70E+00	1.47E+02	1.50E+00
5	580-706	1	0.40	2.00E+00	1.71E+02	1.36E+00
6	687-819	1	0.36	1.80E+00	1.39E+02	1.05E+00
7	767-974	1	0.46	2.30E+00	1.67E+02	8.04E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1547 (Pacific Standard)

Site: On John Muir Trail above Southeast End Charlotte Lake
Measurement by: Dczier

Altitude: 3316 m (10880 ft)

Latitude: +36,46,41

Longitude: -118,25,13

Record No. 0237

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.39	1.95E+00	1.68E+02	1.72E+00
5	580-706	1	0.48	2.40E+00	2.05E+02	1.63E+00
6	687-819	1	0.44	2.20E+00	1.69E+02	1.28E+00
7	767-974	1	0.60	3.00E+00	2.17E+02	1.05E+00

Record No. 0238

Time: 1548 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- in sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.64E+01	8.82E-01
5	580-706	1	0.24	1.20E+00	1.02E+02	8.13E-01
6	687-819	1	0.22	1.10E+00	8.47E+01	6.42E-01
7	767-974	1	0.28	1.40E+00	1.01E+02	4.90E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1550 (Pacific Standard)

Site: On John Muir Trail above Southeast End Charlotte Lake
Measurement by: Dczier

Altitude: 3316 m (10880 ft)

Latitude: +36,46,41
Longitude: -118,25,13

Record No. 0239

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- in shade)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.70	1.40E-01	1.21E+01	1.24E-01
5	580-706	25	0.71	1.42E-01	1.21E+01	9.64E-02
6	687-819	25	0.76	1.52E-01	1.17E+01	8.87E-02
7	767-974	5	0.22	2.20E-01	1.59E+01	7.71E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1648 (Pacific Standard)

Site: On John Muir Trail below Glen Pass
Measurement by: Dozier

Altitude: 3535 m (11600 ft)

Latitude: +36,46,56
Longitude: -118,24,57

Record No. 0240

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.34	1.70E+00	1.47E+02	1.50E+00
5	580-706	1	0.43	2.15E+00	1.84E+02	1.46E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.55	2.75E+00	1.99E+02	9.62E-01

Record No. 0241

Time: 1650 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.63	6.30E-01	5.45E+01	5.56E-01
5	580-706	5	0.90	9.00E-01	7.69E+01	6.10E-01
6	687-819	1	0.20	1.00E+00	7.70E+01	5.83E-01
7	767-974	1	0.24	1.20E+00	8.69E+01	4.20E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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Date: 1 May 1977

Time: 1652 (Pacific Standard)

Site: On John Muir Trail below Glen Pass
Measurement by: Dozier

Altitude: 3535 m (11600 ft)

Latitude: +36,46,56

Longitude: -118,24,57

Record No. 0242

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.65	1.30E-01	1.12E+01	1.15E-01
5	580-706	25	0.67	1.34E-01	1.15E+01	9.09E-02
6	687-819	25	0.57	1.14E-01	8.78E+00	6.65E-02
7	767-974	25	0.79	1.58E-01	1.15E+01	5.53E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1738 (Pacific Standard)

Site: On John Muir Trail above Upper End of Charlotte Lake
Measurement by: Dozier

Altitude: 3304 m (10840 ft)

Latitude: +36,46,34
Longitude: -118,25,08

Record No. 0243

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.23	1.15E+00	9.94E+01	1.01E+00
5	580-706	1	0.31	1.55E+00	1.32E+02	1.05E+00
6	687-819	1	0.32	1.60E+00	1.23E+02	9.33E-01
7	767-974	1	0.46	2.30E+00	1.67E+02	8.04E-01

Record No. 0244

Time: 1740 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.61	1.22E-01	1.06E+01	1.08E-01
5	580-706	25	0.58	1.16E-01	9.92E+00	7.87E-02
6	687-819	25	0.66	1.32E-01	1.02E+01	7.70E-02
7	767-974	5	0.24	2.40E-01	1.74E+01	8.41E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 1 May 1977

Time: 1742 (Pacific Standard)

Site: On John Muir Trail above Upper End of Charlotte Lake
Measurement by: Dozier

Altitude: 3304 m (10840 ft)

Latitude: +36,46,34

Longitude: -118,25,08

Record No. 0245

2 Pi Steradian Field of View (Diffuser)
(Surface normal to slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.29	2.90E-01	2.51E+01	2.56E-01
5	580-706	5	0.34	3.40E-01	2.90E+01	2.30E-01
6	687-819	5	0.39	3.90E-01	3.00E+01	2.27E-01
7	767-974	5	0.68	6.80E-01	4.93E+01	2.38E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1006 (Pacific Standard)

Site: Horseshoe Meadow Road

Measurement by: Millif, Groves, J. Marks

Altitude: 2901 m (9520 ft)

Latitude: +36,27,36

Longitude: -118,09,24

Record No. 0246

1° Field of View (Lens)

(Surface normal to sun -- snowing moderately)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	6.40E+01	6.53E-01
5	580-706	1	0.40	2.00E+00	8.00E+01	6.35E-01
6	687-819	1	0.31	1.55E+00	6.20E+01	4.70E-01
7	767-974	1	0.30	1.50E+00	6.00E+01	2.90E-01

Record No. 0247

Time: 1008 (Pacific Standard)

1° Field of View (Lens)

(On horizontal surface -- snowing moderately)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	4.40E+01	4.49E-01
5	580-706	1	0.24	1.20E+00	4.80E+01	3.81E-01
6	687-819	1	0.21	1.05E+00	4.20E+01	3.18E-01
7	767-974	1	0.24	1.20E+00	4.80E+01	2.32E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1010 (Pacific Standard)

Site: Horseshoe Meadow Road

Measurement by: Millif, Groves, J. Marks

Altitude: 2901 m (9520 ft)

Latitude: +36,27,36

Longitude: -118,09,24

Record No. 0248

1° Field of View (Lens)

(Reflection from horizontal snow surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.14	7.00E-01	2.80E+01	2.86E-01
5	580-706	1	0.20	1.00E+00	4.00E+01	3.17E-01
6	687-819	1	0.13	6.50E-01	2.60E+01	1.97E-01
7	767-974	1	0.20	1.00E+00	4.00E+01	1.93E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1035 (Pacific Standard)

Site: End of Horseshoe Meadow Road

Measurement by: Millif, Groves, J. Marks

Altitude: 3011 m (9880 ft)

Latitude: +36,27,07

Longitude: -118,09,26

Record No. 0249

1° Field of View (Lens)

(On horizontal surface -- light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.30	1.50E+00	6.00E+01	6.12E-01
5	580-706	1	0.32	1.60E+00	6.40E+01	5.08E-01
6	687-819	1	0.24	1.20E+00	4.80E+01	3.64E-01
7	767-974	1	0.31	1.55E+00	6.20E+01	3.00E-01

Record No. 0250

Time: 1037 (Pacific Standard)

1° Field of View (Lens)

(Reflection from horizontal snow surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	4.00E+01	4.08E-01
5	580-706	1	0.21	1.05E+00	4.20E+01	3.33E-01
6	687-819	1	0.14	7.00E-01	2.80E+01	2.12E-01
7	767-974	1	0.21	1.05E+00	4.20E+01	2.03E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1038 (Pacific Standard)

Site: End of Horseshoe Meadow Road

Measurement by: Millif, Groves, J. Marks

Altitude: 3011 m (9880 ft)

Latitude: +36,27,07

Longitude: -118,09,26

Record No. 0251

1° Field of View (lens)
(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	4.40E+01	4.49E-01
5	580-706	1	0.24	1.20E+00	4.80E+01	3.81E-01
6	687-819	1	0.22	1.10E+00	4.40E+01	3.33E-01
7	767-974	1	0.24	1.20E+00	4.80E+01	2.32E-01

Record No. 0252

Time: 1040 (Pacific Standard)

1° Field of View (lens)
(Surface normal to slope -- light snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.41	2.05E+00	8.20E+01	8.37E-01
5	580-706	1	0.53	2.65E+00	1.06E+02	8.41E-01
6	687-819	1	0.34	1.70E+00	6.80E+01	5.15E-01
7	767-974	1	0.42	2.10E+00	8.40E+01	4.06E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1047 (Pacific Standard)

Site: End of Horseshoe Meadow Road

Measurement by: Millif, Groves, J. Marks

Altitude: 3011 m (9880 ft)

Latitude: +36,27,07

Longitude: -118,09,26

Record No. 0253

15° Field of View (Plane Glass)

(On horizontal surface -- snowing hard)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.34	6.80E-02	2.72E+00	2.78E-02
5	580-706	5	0.21	2.10E-01	8.44E+00	6.70E-02
6	687-819	5	0.22	2.20E-01	8.91E+00	6.75E-02
7	767-974	5	0.33	3.30E-01	1.34E+01	6.49E-02

Record No. 0254

Time: 1049 (Pacific Standard)

15° Field of View (Plane Glass)

(Reflection from horizontal snow surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.30	6.00E-02	2.40E+00	2.45E-02
5	580-706	5	0.13	1.30E-01	5.23E+00	4.15E-02
6	687-819	5	0.14	1.40E-01	5.67E+00	4.30E-02
7	767-974	5	0.24	2.40E-01	9.77E+00	4.72E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1051 (Pacific Standard)

Site: End of Horseshoe Meadow Road

Measurement by: Millif, Groves, J. Marks

Altitude: 3011 m (9880 ft)

Latitude: +36,27,07

Longitude: -118,09,26

Record No. 0255

15° Field of View (Plane Glass)
(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.31	6.20E-02	2.48E+00	2.53E-02
5	580-706	5	0.13	1.30E-01	5.23E+00	4.15E-02
6	687-819	5	0.14	1.40E-01	5.67E+00	4.30E-02
7	767-974	5	0.24	2.40E-01	9.77E+00	4.72E-02

Record No. 0256

Time: 1053 (Pacific Standard)

15° Field of View (Plane Glass)
(Surface normal to slope -- snowing hard)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.40	8.00E-02	3.20E+00	3.27E-02
5	580-706	5	0.22	2.20E-01	8.84E+00	7.02E-02
6	687-819	5	0.21	2.10E-01	8.50E+00	6.44E-02
7	767-974	5	0.31	3.10E-01	1.26E+01	6.10E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1142 (Pacific Standard)

Site: North Side of Horseshoe Meadow

Measurement by: Millif, Groves, J. Marks

Altitude: 3035 m (9960 ft)

Latitude: +36,26,59

Longitude: -118,10,48

Record No. 0257

15° Field of View (Plane Glass)

(Surface normal to sun -- snow flurry)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.70	3.50E+00	1.40E+02	1.43E+00
5	580-706	1	0.88	4.40E+00	1.77E+02	1.40E+00
6	687-819	1	0.86	4.30E+00	1.75E+02	1.32E+00
7	767-974	1	1.00	5.00E+00	2.03E+02	9.81E-01

Record No. 0258

Time: 1144 (Pacific Standard)

15° Field of View (Plane Glass)

(On horizontal surface -- snow flurry)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.40	2.00E+00	8.00E+01	8.16E-01
5	580-706	1	0.49	2.45E+00	9.85E+01	7.82E-01
6	687-819	1	0.34	1.70E+00	6.90E+01	5.23E-01
7	767-974	1	0.40	2.00E+00	8.12E+01	3.92E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1146 (Pacific Standard)

Site: North Side of Horseshoe Meadow
Measurement by: Millif, Groves, J. Marks

Altitude: 3035 m (9960 ft)

Latitude: +36,26,59
Longitude: -118,10,48

Record No. 0259

15° Field of View (Plane Glass)
(Reflection from horizontal snow surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	4.80E+01	4.90E-01
5	580-706	1	0.24	1.20E+00	4.82E+01	3.83E-01
6	687-819	1	0.24	1.20E+00	4.87E+01	3.69E-01
7	767-974	1	0.30	1.50E+00	6.09E+01	2.94E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1254 (Pacific Standard)

Site: East Side of Cottonwood Pass

Measurement by: Millif, Groves, J. Marks

Altitude: 3090 m (10140 ft)

Latitude: +36,27,15

Longitude: -118,11,59

Record No. 0260

15° Field of View (Plane Glass)

(Surface normal to sun -- light snow, in forest)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.44	2.20E+00	8.80E+01	8.98E-01
5	580-706	1	0.40	2.00E+00	8.04E+01	6.38E-01
6	687-819	1	0.31	1.55E+00	6.29E+01	4.77E-01
7	767-974	1	0.33	1.65E+00	6.70E+01	3.24E-01

Record No. 0261

Time: 1256 (Pacific Standard)

15° Field of View (Plane Glass)

(On horizontal surface -- light snow, clearing, in forest)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	6.40E+01	6.53E-01
5	580-706	1	0.41	2.05E+00	8.24E+01	6.54E-01
6	687-819	1	0.34	1.70E+00	6.90E+01	5.23E-01
7	767-974	1	0.51	2.55E+00	1.04E+02	5.00E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1257 (Pacific Standard)

Site: East Side of Cottonwood Pass

Measurement by: Millif, Groves, J. Marks

Altitude: 3090 m (10140 ft)

Latitude: +36,27,15

Longitude: -118,11,59

Record No. 0262

15° Field of View (Plane Glass)

(Reflection from horizontal snow surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.73	7.30E-01	2.92E+01	2.98E-01
5	580-706	5	0.53	5.30E-01	2.13E+01	1.69E-01
6	687-819	5	0.50	5.00E-01	2.03E+01	1.53E-01
7	767-974	5	0.60	6.00E-01	2.44E+01	1.18E-01

Record No. 0263

Time: 1259 (Pacific Standard)

15° Field of View (Plane Glass)

(Reflection from slope)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.44	4.40E-01	1.76E+01	1.80E-01
5	580-706	5	0.51	5.10E-01	2.05E+01	1.63E-01
6	687-819	5	0.43	4.30E-01	1.74E+01	1.32E-01
7	767-974	5	0.54	5.40E-01	2.20E+01	1.06E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1300 (Pacific Standard)

Site: East Side of Cottonwood Pass

Measurement by: Millif, Groves, J. Marks

Altitude: 3090 m (10140 ft)

Latitude: +36,27,15

Longitude: -118,11,59

Record No. 0264

15° Field of View (Plane Glass)

(Surface normal to slope -- clouds?)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.40	4.00E-01	1.60E+01	1.63E-01
5	580-706	1	0.30	1.50E+00	6.03E+01	4.79E-01
6	687-819	1	0.14	7.00E-01	2.84E+01	2.15E-01
7	767-974	1	0.30	1.50E+00	6.09E+01	2.94E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 13 May 1977

Time: 1505 (Pacific Standard)

Site: Summit of Cottonwood Pass

Measurement by: Millif, Groves, J. Marks

Altitude: 3401 m (11160 ft)

Latitude: +36,27,12

Longitude: -118,12,53

Record No. 0265

15° Field of View (Plane Glass)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.55	2.75E+00	1.10E+02	1.12E+00
5	580-706	1	0.60	3.00E+00	1.21E+02	9.57E-01
6	687-819	1	0.50	2.50E+00	1.02E+02	7.69E-01
7	767-974	1	0.60	3.00E+00	1.22E+02	5.88E-01

Record No. 0266

Time: 1607 (Pacific Standard)

15° Field of View (Plane Glass)
(On horizontal surface -- sun unobscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.73	3.65E+00	1.46E+02	1.49E+00
5	580-706	1	0.86	4.30E+00	1.73E+02	1.37E+00
6	687-819	1	0.67	3.35E+00	1.36E+02	1.03E+00
7	767-974	1	0.80	4.00E+00	1.62E+02	7.85E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GBCUND
TRUTH RADICMETER, MCDL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 0915 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17
Longitude: -118,24,01

Record No. 0267

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.36E+02	1.39E+00
5	580-706	1	0.39	1.95E+00	1.56E+02	1.24E+00
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.28	1.40E+00	1.01E+02	4.88E-01

Record No. 0268

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.88E+01	8.04E-01
5	580-706	1	0.22	1.10E+00	8.82E+01	7.00E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.25	1.25E+00	9.03E+01	4.36E-01

150

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 0915 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17
Longitude: -118,24,01

Record No. 0269

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.62	6.20E-01	5.43E+01	5.54E-01
5	580-706	5	0.87	8.70E-01	6.98E+01	5.54E-01
6	687-819	5	0.76	7.60E-01	5.70E+01	4.32E-01
7	767-974	5	0.97	9.70E-01	7.00E+01	3.38E-01

Record No. 0270

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.82	8.20E-01	7.18E+01	7.33E-01
5	580-706	1	0.20	1.00E+00	8.02E+01	6.37E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.24	1.20E+00	8.66E+01	4.19E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 1100 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17
Longitude: -118,24,01

Record No. 0271

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.36E+02	1.39E+00
5	580-706	1	0.51	2.55E+00	2.05E+02	1.62E+00
6	687-819	1	0.49	2.45E+00	1.84E+02	1.39E+00
7	767-974	1	0.69	3.45E+00	2.49E+02	1.20E+00

Record No. 0272

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.28	1.40E+00	1.23E+02	1.25E+00
5	580-706	1	0.53	2.65E+00	2.13E+02	1.69E+00
6	687-819	1	0.37	1.85E+00	1.39E+02	1.05E+00
7	767-974	1	0.32	1.60E+00	1.16E+02	5.58E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 1100 (Pacific Standard).

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17
Longitude: -118,24,01

Record No. 0273

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.23	1.15E+00	1.01E+02	1.03E+00
5	580-706	1	0.30	1.50E+00	1.20E+02	9.55E-01
6	687-819	1	0.26	1.30E+00	9.75E+01	7.39E-01
7	767-974	1	0.30	1.50E+00	1.08E+02	5.23E-01

Record No. 0274

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.25	1.25E+00	1.10E+02	1.12E+00
5	580-706	1	0.24	1.20E+00	9.62E+01	7.64E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.32	1.60E+00	1.16E+02	5.58E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 1220 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17
Longitude: -118,24,01

Record No. 0275

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- 9/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.82	8.20E-01	7.18E+01	7.33E-01
5	580-706	1	0.21	1.05E+00	8.42E+01	6.68E-01
6	687-819	5	0.93	9.30E-01	6.97E+01	5.28E-01
7	767-974	1	0.23	1.15E+00	8.30E+01	4.01E-01

Record No. 0276

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- 9/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.68	6.80E-01	5.96E+01	6.08E-01
5	580-706	5	0.83	8.30E-01	6.66E+01	5.28E-01
6	687-819	5	0.75	7.50E-01	5.63E+01	4.26E-01
7	767-974	5	0.91	9.10E-01	6.57E+01	3.17E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 1220 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake

Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0277

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- 9/10 cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.53	5.30E-01	4.64E+01	4.74E-01
5	580-706	5	0.65	6.50E-01	5.21E+01	4.14E-01
6	687-819	5	0.59	5.90E-01	4.42E+01	3.35E-01
7	767-974	5	0.72	7.20E-01	5.20E+01	2.51E-01

Record No. 0278

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.41	4.10E-01	3.59E+01	3.66E-01
5	580-706	5	0.53	5.30E-01	4.25E+01	3.37E-01
6	687-819	5	0.51	5.10E-01	3.82E+01	2.90E-01
7	767-974	5	0.61	6.10E-01	4.40E+01	2.13E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 1435 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0279

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- cloud cover not specified)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.28	2.80E-01	2.45E+01	2.50E-01
5	580-706	5	0.50	5.00E-01	4.01E+01	3.18E-01
6	687-819	5	0.48	4.80E-01	3.60E+01	2.73E-01
7	767-974	5	0.63	6.30E-01	4.55E+01	2.20E-01

Record No. 0280

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- cloud cover not specified)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.49	4.90E-01	4.29E+01	4.38E-01
5	580-706	5	0.67	6.70E-01	5.37E+01	4.26E-01
6	687-819	5	0.60	6.00E-01	4.50E+01	3.41E-01
7	767-974	5	0.74	7.40E-01	5.34E+01	2.58E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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Date: 1 May 1977

Time: 1435 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0281

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- cloud cover not specified)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.40	4.00E-01	3.50E+01	3.58E-01
5	580-706	5	0.50	5.00E-01	4.01E+01	3.18E-01
6	687-819	5	0.47	4.70E-01	3.52E+01	2.67E-01
7	767-974	5	0.55	5.50E-01	3.97E+01	1.92E-01

Record No. 0282

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.33	3.30E-01	2.89E+01	2.95E-01
5	580-706	5	0.41	4.10E-01	3.29E+01	2.61E-01
6	687-819	5	0.37	3.70E-01	2.77E+01	2.10E-01
7	767-974	5	0.42	4.20E-01	3.03E+01	1.46E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 1835 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0283

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	125	0.06	2.40E-03	2.11E-01	2.15E-03
5	580-706	125	0.06	2.40E-03	1.93E-01	1.53E-03
6	687-819	125	0.08	3.20E-03	2.40E-01	1.82E-03
7	767-974	125	0.90	3.60E-02	2.60E+00	1.26E-02

Record No. 0284

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	125	0.09	3.60E-03	3.16E-01	3.22E-03
5	580-706	125	0.10	4.00E-03	3.21E-01	2.55E-03
6	687-819	125	0.11	4.40E-03	3.30E-01	2.50E-03
7	767-974	125	0.12	4.80E-03	3.47E-01	1.68E-03

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 1 May 1977

Time: 1835 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0285

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	125	0.06	2.40E-03	2.11E-01	2.15E-03
5	580-706	125	0.07	2.80E-03	2.25E-01	1.78E-03
6	687-819	125	0.08	3.20E-03	2.40E-01	1.82E-03
7	767-974	125	0.07	2.80E-03	2.02E-01	9.77E-04

Record No. 0286

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	125	0.03	1.20E-03	1.05E-01	1.07E-03
5	580-706	125	0.03	1.20E-03	9.63E-02	7.64E-04
6	687-819	125	0.04	1.60E-03	1.20E-01	9.09E-04
7	767-974	125	0.04	1.60E-03	1.16E-01	5.58E-04

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 2 May 1977

Time: 0600 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake
Measurement by: Goid, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0287

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.89	1.78E-01	1.56E+01	1.59E-01
5	580-706	5	0.26	2.60E-01	2.09E+01	1.65E-01
6	687-819	5	0.22	2.20E-01	1.65E+01	1.25E-01
7	767-974	5	0.28	2.80E-01	2.02E+01	9.77E-02

Record No. 0288

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.45	9.00E-02	7.87E+00	8.04E-02
5	580-706	25	0.71	1.42E-01	1.14E+01	9.02E-02
6	687-819	25	0.69	1.38E-01	1.03E+01	7.84E-02
7	767-974	25	0.84	1.68E-01	1.21E+01	5.84E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 2 May 1977

Time: 0600 (Pacific Standard)

Site: Camp above East Shore of Bullfrog Lake

Measurement by: Gold, Roberts

Altitude: 3236 m (10620 ft)

Latitude: +36,46,17

Longitude: -118,24,01

Record No. 0289

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.25	5.00E-02	4.38E+00	4.46E-02
5	580-706	25	0.32	6.40E-02	5.12E+00	4.06E-02
6	687-819	25	0.53	1.06E-01	7.95E+00	6.02E-02
7	767-974	25	0.80	1.60E-01	1.15E+01	5.57E-02

Record No. 0290

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.28	5.60E-02	4.90E+00	5.00E-02
5	580-706	25	0.35	7.00E-02	5.60E+00	4.44E-02
6	687-819	25	0.41	8.20E-02	6.15E+00	4.66E-02
7	767-974	25	0.52	1.04E-01	7.49E+00	3.62E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 0958 (Pacific Standard)

Site: Horseshoe Meadow Road
Measurement by: Marks et al

Altitude: 2926 m (9600 ft)

Latitude: +36,27,37
Longitude: -118,09,30

Record No. 0291

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- snowing, at base of complete cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.74	7.40E-01	6.48E+01	6.61E-01
5	580-706	1	0.22	1.10E+00	8.82E+01	7.00E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.23	1.15E+00	8.30E+01	4.01E-01

Record No. 0292

Time: 1000 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.54	5.40E-01	4.73E+01	4.83E-01
5	580-706	5	0.70	7.00E-01	5.61E+01	4.46E-01
6	687-819	5	0.64	6.40E-01	4.80E+01	3.64E-01
7	767-974	5	0.70	7.00E-01	5.05E+01	2.44E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1059 (Pacific Standard)

Site: Junction Cottonwood/Trail Passes

Measurement by: Marks et al

Altitude: 3026 m (9930 ft)

Latitude: +36,26,55

Longitude: -118,09,36

Record No. 0293

2 Pi Steradian Field of View (Diffuser)

(On horizontal surface -- snowing, at base of complete cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.59	5.90E-01	5.17E+01	5.27E-01
5	580-706	5	0.81	8.10E-01	6.50E+01	5.16E-01
6	687-819	5	0.80	8.00E-01	6.00E+01	4.55E-01
7	767-974	1	0.19	9.50E-01	6.86E+01	3.31E-01

Record No. 0294

Time: 1201 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.42	4.20E-01	3.68E+01	3.75E-01
5	580-706	5	0.61	6.10E-01	4.89E+01	3.88E-01
6	687-819	5	0.59	5.90E-01	4.42E+01	3.35E-01
7	767-974	5	0.70	7.00E-01	5.05E+01	2.44E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1203 (Pacific Standard)

Site: South Side of Horseshoe Meadow above Road

Measurement by: Marks et al

Altitude: 3017 m (9900 ft)

Latitude: +36,26,13

Longitude: -118,10,05

Record No. 0295

2 Pi Steradian Field of View (Diffuser)

(On horizontal surface -- snowing, complete cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.05E+02	1.07E+00
5	580-706	1	0.33	1.65E+00	1.32E+02	1.05E+00
6	687-819	1	0.29	1.45E+00	1.09E+02	8.24E-01
7	767-974	1	0.36	1.80E+00	1.30E+02	6.28E-01

Record No. 0296

Time: 1206 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.76E+01	8.94E-01
5	580-706	1	0.30	1.50E+00	1.20E+02	9.55E-01
6	687-819	1	0.28	1.40E+00	1.05E+02	7.95E-01
7	767-974	1	0.34	1.70E+00	1.23E+02	5.93E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1321 (Pacific Standard)

Site: North Side of Trail Pass
Measurement by: Marks et al

Altitude: 3121 m (10240 ft)

Latitude: +36,26,04
Longitude: -118,10,22

Record No. 0297

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- light snow, 10/10 thin cloud cover)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.38	3.80E-01	3.33E+01	3.40E-01
5	580-706	5	0.54	5.40E-01	4.33E+01	3.44E-01
6	687-819	5	0.56	5.60E-01	4.20E+01	3.18E-01
7	767-974	5	0.71	7.10E-01	5.13E+01	2.48E-01

Record No. 0298

Time: 1224 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.32	3.20E-01	2.80E+01	2.86E-01
5	580-706	5	0.45	4.50E-01	3.61E+01	2.86E-01
6	687-819	5	0.42	4.20E-01	3.15E+01	2.39E-01
7	767-974	5	0.50	5.00E-01	3.61E+01	1.74E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1400 (Pacific Standard)

Site: Summit of Trail Pass
Measurement by: Marks et al

Altitude: 3200 m (10500 ft)

Latitude: +36,25,38

Longitude: -118,10,34

Record No. 0299

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- light snow, 10/10 cloud cover breaking)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.78	7.30E-01	6.83E+01	6.97E-01
5	580-706	1	0.22	1.10E+00	8.82E+01	7.00E-01
6	687-819	1	0.19	9.50E-01	7.12E+01	5.40E-01
7	767-974	1	0.22	1.10E+00	7.94E+01	3.84E-01

Record No. 0300

Time: 1402 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.65	6.50E-01	5.69E+01	5.81E-01
5	580-706	5	0.85	8.50E-01	6.82E+01	5.41E-01
6	687-819	1	0.14	7.00E-01	5.25E+01	3.98E-01
7	767-974	1	0.14	7.00E-01	5.05E+01	2.44E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1459 (Pacific Standard)

Site: South Side of Horseshoe Meadow in Trees

Measurement by: Marks et al

Altitude: 3023 m (9920 ft)

Latitude: +36,26,08

Longitude: -118,10,46

Record No. 0301

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- partly cloudy)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	9.64E+01	9.83E-01
5	580-706	1	0.29	1.45E+00	1.16E+02	9.23E-01
6	687-819	1	0.28	1.40E+00	1.05E+02	7.95E-01
7	767-974	1	0.34	1.70E+00	1.23E+02	5.93E-01

Record No. 0302

Time: 1500 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.16	8.00E-01	7.01E+01	7.15E-01
5	580-706	1	0.24	1.20E+00	9.62E+01	7.64E-01
6	687-819	1	0.21	1.05E+00	7.87E+01	5.97E-01
7	767-974	1	0.25	1.25E+00	9.03E+01	4.36E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1538 (Pacific Standard)

Site: Horseshoe Meadow Creek
Measurement by: Marks et al

Altitude: 2987 m (9800 ft)

Latitude: +36,26,42

Longitude: -118,09,30

Record No. 0303

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- patchy clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.37	3.70E-01	3.24E+01	3.31E-01
5	580-706	5	0.50	5.00E-01	4.01E+01	3.18E-01
6	687-819	5	0.49	4.90E-01	3.67E+01	2.78E-01
7	767-974	5	0.63	6.30E-01	4.55E+01	2.20E-01

Record No. 0304

Time: 1540 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- patchy clouds)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.19	1.90E-01	1.66E+01	1.70E-01
5	580-706	5	0.22	2.20E-01	1.76E+01	1.40E-01
6	687-819	5	0.22	2.20E-01	1.65E+01	1.25E-01
7	767-974	5	0.26	2.60E-01	1.88E+01	9.07E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1620 (Pacific Standard)

Site: End of Horseshoe Meadow Road
Measurement by: Marks et al

Altitude: 3011 m (9880 ft)

Latitude: +36,27,11
Longitude: -118,09,39

Record No. 0305

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- partly cloudy, sun obscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.77	7.70E-01	6.75E+01	6.88E-01
5	580-706	5	0.96	9.60E-01	7.70E+01	6.11E-01
6	687-819	5	0.95	9.50E-01	7.12E+01	5.40E-01
7	767-974	5	0.21	2.10E-01	1.52E+01	7.32E-02

Record No. 0306

Time: 1623 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- partly cloudy, sun obscured)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.16	1.60E-01	1.40E+01	1.43E-01
5	580-706	5	0.19	1.90E-01	1.52E+01	1.21E-01
6	687-819	5	0.18	1.80E-01	1.35E+01	1.02E-01
7	767-974	5	0.28	2.80E-01	2.02E+01	9.77E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1739 (Pacific Standard)

Site: Camp in Last Chance Meadow

Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44

Longitude: -118,09,06

Record No. 0307

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface -- clearing)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.63	1.26E-01	1.10E+01	1.12E-01
5	580-706	25	0.83	1.66E-01	1.33E+01	1.05E-01
6	687-819	25	0.84	1.68E-01	1.26E+01	9.55E-02
7	767-974	5	0.22	2.20E-01	1.59E+01	7.67E-02

Record No. 0308

Time: 1741 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.52	1.04E-01	9.10E+00	9.29E-02
5	580-706	25	0.72	1.44E-01	1.15E+01	9.14E-02
6	687-819	25	0.70	1.40E-01	1.05E+01	7.95E-02
7	767-974	5	0.15	1.50E-01	1.08E+01	5.23E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 13 May 1977

Time: 1743 (Pacific Standard)

Site: Camp in Last Chance Meadow
Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44

Longitude: -118,09,06

Record No. 0309

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun -- clearing, sun unobscured?)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.70	1.40E-01	1.22E+01	1.25E-01
5	580-706	25	0.95	1.90E-01	1.52E+01	1.21E-01
6	687-819	25	0.90	1.80E-01	1.35E+01	1.02E-01
7	767-974	5	0.23	2.30E-01	1.66E+01	8.02E-02

Record No. 0310

Time: 1746 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun -- clearing)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.35	7.00E-02	6.12E+00	6.25E-02
5	580-706	25	0.42	8.40E-02	6.72E+00	5.33E-02
6	687-819	25	0.45	9.00E-02	6.75E+00	5.11E-02
7	767-974	5	0.12	1.20E-01	8.66E+00	4.19E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 0748 (Pacific Standard)

Site: Camp in Last Chance Meadow
Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44

Longitude: -118,09,06

Record No. 0311

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.88E+01	8.04E-01
5	580-706	1	0.22	1.10E+00	8.82E+01	7.00E-01
6	687-819	1	0.20	1.00E+00	7.50E+01	5.68E-01
7	767-974	1	0.25	1.25E+00	9.03E+01	4.36E-01

Record No. 0312

Time: 0749 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.17	8.50E-01	7.45E+01	7.60E-01
5	580-706	1	0.21	1.05E+00	8.42E+01	6.68E-01
6	687-819	1	0.19	9.50E-01	7.12E+01	5.40E-01
7	767-974	1	0.23	1.15E+00	8.30E+01	4.01E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 0750 (Pacific Standard)

Site: Camp in Last Chance Meadow
Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44

Longitude: -118,09,06

Record No. 0313

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.49	2.45E+00	1.96E+02	1.56E+00
6	687-819	1	0.45	2.25E+00	1.69E+02	1.28E+00
7	767-974	1	0.62	3.10E+00	2.24E+02	1.08E+00

Record No. 0314

Time: 0751 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.22	2.20E-01	1.93E+01	1.97E-01
5	580-706	5	0.15	1.50E-01	1.20E+01	9.55E-02
6	687-819	5	0.25	2.50E-01	1.88E+01	1.42E-01
7	767-974	5	0.45	4.50E-01	3.25E+01	1.57E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 0845 (Pacific Standard)

Site: Camp in Last Chance Meadow
Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44
Longitude: -118,09,06

Record No. 0315

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.25	1.25E+00	1.10E+02	1.12E+00
5	580-706	1	0.35	1.75E+00	1.40E+02	1.11E+00
6	687-819	1	0.31	1.55E+00	1.16E+02	8.81E-01
7	767-974	1	0.36	1.80E+00	1.30E+02	6.28E-01

Record No. 0316

Time: 0847 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.88E+01	8.04E-01
5	580-706	1	0.25	1.25E+00	1.00E+02	7.96E-01
6	687-819	1	0.22	1.10E+00	8.25E+01	6.25E-01
7	767-974	1	0.25	1.25E+00	9.03E+01	4.36E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADICMETER, MCDL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 0849 (Pacific Standard)

Site: Camp in Last Chance Meadow
Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44
Longitude: -118,09,06

Record No. 0317

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.47	2.35E+00	1.88E+02	1.50E+00
6	687-819	1	0.44	2.20E+00	1.65E+02	1.25E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0318

Time: 0851 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.45	4.50E-01	3.94E+01	4.02E-01
5	580-706	5	0.58	5.80E-01	4.65E+01	3.69E-01
6	687-819	5	0.65	6.50E-01	4.87E+01	3.69E-01
7	767-974	5	0.86	8.60E-01	6.21E+01	3.00E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 0930 (Pacific Standard)

Site: Camp in Last Chance Meadow

Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44

Longitude: -118,09,06

Record No. 0319

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Eand</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.34	1.70E+00	1.49E+02	1.52E+00
5	580-706	1	0.49	2.45E+00	1.96E+02	1.56E+00
6	687-819	1	0.45	2.25E+00	1.69E+02	1.28E+00
7	767-974	1	0.60	3.00E+00	2.17E+02	1.05E+00

Record No. 0320

Time: 0932 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.76E+01	8.94E-01
5	580-706	1	0.26	1.30E+00	1.04E+02	8.27E-01
6	687-819	1	0.22	1.10E+00	8.25E+01	6.25E-01
7	767-974	1	0.23	1.15E+00	8.30E+01	4.01E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 0934 (Pacific Standard)

Site: Camp in Last Chance Meadow
Measurement by: Marks et al?

Altitude: 2889 m (9480 ft)

Latitude: +36,27,44
Longitude: -118,09,06

Record No. 0321

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.14E+02	1.16E+00
5	580-706	1	0.35	1.75E+00	1.40E+02	1.11E+00
6	687-819	1	0.31	1.55E+00	1.16E+02	8.81E-01
7	767-974	1	0.36	1.80E+00	1.30E+02	6.28E-01

Record No. 0322

Time: 0936 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.76E+01	8.94E-01
5	580-706	1	0.26	1.30E+00	1.04E+02	8.27E-01
6	687-819	1	0.24	1.20E+00	9.00E+01	6.82E-01
7	767-974	1	0.24	1.20E+00	8.66E+01	4.19E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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Date: 14 May 1977

Time: 1045 (Pacific Standard)

Site: Horseshoe Mdw Rd between Little Cottonwood & Cottonwood
Measurement by: Marks?

Altitude: 3029 m (9940 ft)

Latitude: +36,28,18

Longitude: -118,07,47

Record No. 0323

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.36E+02	1.39E+00
5	580-706	1	0.42	2.10E+00	1.68E+02	1.34E+00
6	687-819	1	0.37	1.85E+00	1.39E+02	1.05E+00
7	767-974	1	0.46	2.30E+00	1.66E+02	8.02E-01

Record No. 0324

Time: 1046 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	9.64E+01	9.83E-01
5	580-706	1	0.30	1.50E+00	1.20E+02	9.55E-01
6	687-819	1	0.26	1.30E+00	9.75E+01	7.39E-01
7	767-974	1	0.27	1.35E+00	9.75E+01	4.71E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 1047 (Pacific Standard)

Site: Horseshoe Mdw Rd between Little Cottonwood & Cottonwood
Measurement by: Marks?

Altitude: 3029 m (9940 ft)

Latitude: +36,28,18
Longitude: -118,07,47

Record No. 0325

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.45	2.25E+00	1.80E+02	1.43E+00
6	687-819	1	0.44	2.20E+00	1.65E+02	1.25E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0326

Time: 1048 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.20	1.00E+00	8.76E+01	8.94E-01
5	580-706	1	0.27	1.35E+00	1.08E+02	8.59E-01
6	687-819	1	0.25	1.25E+00	9.38E+01	7.10E-01
7	767-974	1	0.26	1.30E+00	9.39E+01	4.53E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 1255 (Pacific Standard)

Site: Second Switchback on Horseshoe Meadow Road

Measurement by: Marks?

Altitude: 2170 m (7120 ft)

Latitude: +36,29,34

Longitude: -118,05,58

Record No. 0327

2 Pi Steradian Field of View (Diffuser)
(On horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.40E+02	1.43E+00
5	580-706	1	0.44	2.20E+00	1.76E+02	1.40E+00
6	687-819	1	0.37	1.85E+00	1.39E+02	1.05E+00
7	767-974	1	0.47	2.35E+00	1.70E+02	8.20E-01

Record No. 0328

Time: 1257 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Reflection from horizontal snow)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.10	5.00E-01	4.38E+01	4.47E-01
5	580-706	1	0.28	1.40E+00	1.12E+02	8.91E-01
6	687-819	1	0.21	1.05E+00	7.87E+01	5.97E-01
7	767-974	1	0.22	1.10E+00	7.94E+01	3.84E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 14 May 1977

Time: 1259 (Pacific Standard)

Site: Second Switchback on Horseshoe Meadow Road
Measurement by: Marks?

Altitude: 2170 m (7120 ft)

Latitude: +36,29,34
Longitude: -118,05,58

Record No. 0329

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.49	2.45E+00	1.96E+02	1.56E+00
6	687-819	1	0.44	2.20E+00	1.65E+02	1.25E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0330

Time: 1301 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.19	9.50E-01	8.32E+01	8.49E-01
5	580-706	1	0.26	1.30E+00	1.04E+02	8.27E-01
6	687-819	1	0.21	1.05E+00	7.87E+01	5.97E-01
7	767-974	1	0.21	1.05E+00	7.58E+01	3.66E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1253 (Pacific Standard)

Site: Valentine Reserve - Front of University Cabin
Measurement by: Baggett, Witebsky

Altitude: 2456 m (8060 ft)

Latitude: +37,37,47

Longitude: -118,59,41

Record No. 0331

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.44	2.20E+00	1.88E+02	1.49E+00
6	687-819	1	0.41	2.05E+00	1.58E+02	1.20E+00
7	767-974	1	0.58	2.90E+00	2.10E+02	1.01E+00

Record No. 0332

Time: 1255 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface - trees in view)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.38E+02	1.41E+00
5	580-706	1	0.41	2.05E+00	1.75E+02	1.39E+00
6	687-819	1	0.38	1.90E+00	1.46E+02	1.11E+00
7	767-974	1	0.53	2.65E+00	1.92E+02	9.27E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1300 (Pacific Standard)

Site: Valentine Reserve - Front of University Cabin
Measurement by: Baggett, Witebsky

Altitude: 2456 m (8060 ft)

Latitude: +37,37,47

Longitude: -118,59,41

Record No. 0333

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun - trees in view)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.29	5.80E-02	5.02E+00	5.12E-02
5	530-706	25	0.33	6.60E-02	5.64E+00	4.48E-02
6	687-819	25	0.81	1.62E-01	1.25E+01	9.45E-02
7	767-974	5	0.31	3.10E-01	2.25E+01	1.09E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1312 (Pacific Standard)

Site: Valentine Reserve - in Meadow
Measurement by: Baggett, Witebsky

Altitude: 2462 m (8080 ft)

Latitude: +37,37,55

Longitude: -118,59,33

Record No. 0334

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.57	2.85E+00	2.06E+02	9.97E-01

Record No. 0335

Time: 1314 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.34E+02	1.37E+00
5	580-706	1	0.38	1.90E+00	1.62E+02	1.29E+00
6	687-819	1	0.29	1.45E+00	1.12E+02	8.46E-01
7	767-974	1	0.43	2.15E+00	1.56E+02	7.52E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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Date: 29 May 1977

Time: 1317 (Pacific Standard)

Site: Valentine Reserve - in Meadow

Measurement by: Baggett, Witebsky

Altitude: 2462 m (8080 ft)

Latitude: +37,37,55

Longitude: -118,59,33

Record No. 0336

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.59	1.18E-01	1.02E+01	1.04E-01
5	580-706	25	0.62	1.24E-01	1.06E+01	8.41E-02
6	687-819	25	0.86	1.72E-01	1.32E+01	1.00E-01
7	767-974	5	0.29	2.90E-01	2.10E+01	1.02E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1322 (Pacific Standard)

Site: Valentine Reserve - Top of Hill
Measurement by: Baggett, Witebsky

Altitude: 2487 m (8160 ft)

Latitude: +37,38,09

Longitude: -118,59,30

Record No. 0337

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0338

Time: 1324 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.34E+02	1.37E+00
5	580-706	1	0.33	1.65E+00	1.41E+02	1.12E+00
6	687-819	1	0.25	1.25E+00	9.63E+01	7.29E-01
7	767-974	1	0.36	1.80E+00	1.30E+02	6.30E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1326 (Pacific Standard)

Site: Valentine Reserve - Top of Hill
Measurement by: Baggett, Witebsky

Altitude: 2487 m (8160 ft)

Latitude: +37,38,09

Longitude: -118,59,30

Record No. 0339

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.61	1.22E-01	1.06E+01	1.08E-01
5	580-706	25	0.61	1.22E-01	1.04E+01	8.28E-02
6	687-819	25	0.62	1.24E-01	9.55E+00	7.23E-02
7	767-974	5	0.20	2.00E-01	1.45E+01	7.00E-02

Record No. 0340

Time: 1331 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.46	2.30E+00	1.96E+02	1.56E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.55	2.75E+00	1.99E+02	9.62E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1333 (Pacific Standard)

Site: Valentine Reserve - Top of Hill

Measurement by: Eaggett, Witebsky

Altitude: 2487 m (8160 ft)

Latitude: +37,38,09

Longitude: -118,59,30

Record No. 0341

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.43E+02	1.45E+00
5	580-706	1	0.41	2.05E+00	1.75E+02	1.39E+00
6	687-819	1	0.35	1.75E+00	1.35E+02	1.02E+00
7	767-974	1	0.48	2.40E+00	1.74E+02	8.39E-01

Record No. 0342

Time: 1335 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.62	1.24E-01	1.07E+01	1.09E-01
5	580-706	25	0.63	1.26E-01	1.08E+01	8.55E-02
6	687-819	25	0.62	1.24E-01	9.55E+00	7.23E-02
7	767-974	25	0.96	1.92E-01	1.39E+01	6.72E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1347 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow

Measurement by: Baggett, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,03

Longitude: -118,59,31

Record No. 0343

2 Pi Steradian Field of View (Diffuser)

(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.44	2.20E+00	1.88E+02	1.49E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0344

Time: 1349 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.31	1.55E+00	1.34E+02	1.37E+00
5	580-706	1	0.35	1.75E+00	1.49E+02	1.19E+00
6	687-819	1	0.30	1.50E+00	1.15E+02	8.75E-01
7	767-974	1	0.44	2.20E+00	1.59E+02	7.69E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1351 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow

Measurement by: Baggett, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,03

Longitude: -118,59,31

Record No. 0345

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.51	1.02E-01	8.82E+00	9.00E-02
5	580-706	25	0.51	1.02E-01	8.72E+00	6.92E-02
6	687-819	25	0.70	1.40E-01	1.08E+01	8.17E-02
7	767-974	5	0.22	2.20E-01	1.59E+01	7.71E-02

Record No. 0346

Time: 1353 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.56E+02	1.59E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1356 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow
Measurement by: Baggett, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,03

Longitude: -118,59,31

Record No. 0347

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.38E+02	1.41E+00
5	580-706	1	0.38	1.90E+00	1.62E+02	1.29E+00
6	687-819	1	0.33	1.65E+00	1.27E+02	9.62E-01
7	767-974	1	0.47	2.35E+00	1.70E+02	8.22E-01

Record No. 0348

Time: 1358 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.49	9.80E-02	8.48E+00	8.65E-02
5	580-706	25	0.49	9.80E-02	8.38E+00	6.65E-02
6	687-819	25	0.65	1.30E-01	1.00E+01	7.58E-02
7	767-974	5	0.22	2.20E-01	1.59E+01	7.71E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1409 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow
Measurement by: Baggett, Johnson, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,04
Longitude: -118,59,22

Record No. 0349

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.44	2.20E+00	1.88E+02	1.49E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0350

Time: 1412 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.12E+02	1.15E+00
5	580-706	1	0.33	1.65E+00	1.41E+02	1.12E+00
6	687-819	1	0.30	1.50E+00	1.15E+02	8.75E-01
7	767-974	1	0.41	2.05E+00	1.48E+02	7.17E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1415 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow

Measurement by: Baggett, Johnson, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,04

Longitude: -118,59,22

Record No. 0351

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.49	9.80E-02	8.48E+00	8.65E-02
5	580-706	25	0.45	9.00E-02	7.69E+00	6.11E-02
6	687-819	25	0.63	1.26E-01	9.70E+00	7.35E-02
7	767-974	5	0.20	2.00E-01	1.45E+01	7.00E-02

Record No. 0352

Time: 1418 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.56E+02	1.59E+00
5	580-706	1	0.44	2.20E+00	1.88E+02	1.49E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.55	2.75E+00	1.99E+02	9.62E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1420 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow

Measurement by: Eaggett, Johnson, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,04

Longitude: -118,59,22

Record No. 0353

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.12E+02	1.15E+00
5	580-706	1	0.31	1.55E+00	1.32E+02	1.05E+00
6	687-819	1	0.29	1.45E+00	1.12E+02	8.46E-01
7	767-974	1	0.37	1.85E+00	1.34E+02	6.47E-01

Record No. 0354

Time: 1421 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.50	1.00E-01	8.65E+00	8.83E-02
5	580-706	25	0.48	9.60E-02	8.21E+00	6.51E-02
6	687-819	25	0.64	1.28E-01	9.86E+00	7.47E-02
7	767-974	5	0.20	2.00E-01	1.45E+01	7.00E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 29 May 1977

Time: 1423 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow

Measurement by: Paggett, Johnson, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,04

Longitude: -118,59,22

Record No. 0355

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.44	2.20E+00	1.88E+02	1.49E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.57	2.85E+00	2.06E+02	9.97E-01

Record No. 0356

Time: 1424 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.12E+02	1.15E+00
5	580-706	1	0.34	1.70E+00	1.45E+02	1.15E+00
6	687-819	1	0.27	1.35E+00	1.04E+02	7.87E-01
7	767-974	1	0.40	2.00E+00	1.45E+02	7.00E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

197

Date: 29 May 1977

Time: 1425 (Pacific Standard)

Site: Valentine Reserve - Hillside above Meadow
Measurement by: Baggett, Johnson, Witebsky

Altitude: 2459 m (8070 ft)

Latitude: +37,38,04
Longitude: -118,59,22

Record No. 0357

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.49	9.80E-02	8.48E+00	8.65E-02
5	580-706	25	0.45	9.00E-02	7.69E+00	6.11E-02
6	687-819	25	0.55	1.10E-01	8.47E+00	6.42E-02
7	767-974	25	0.98	1.96E-01	1.42E+01	6.86E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1140 (Pacific Standard)

Site: Northeast End of McCloud Lake

Measurement by: Cornwall, Hansen, Kull

Altitude: 2816 m (9240 ft)

Latitude: +37,36,33

Longitude: -119,01,44

Record No. 0358

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.41	2.05E+00	1.58E+02	1.20E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0359

Time: 1143 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.34	1.70E+00	1.47E+02	1.50E+00
5	580-706	1	0.42	2.10E+00	1.79E+02	1.42E+00
6	687-819	1	0.36	1.80E+00	1.39E+02	1.05E+00
7	767-974	1	0.51	2.55E+00	1.85E+02	8.92E-01

C-B

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADICMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1145 (Pacific Standard)

Site: Northeast End of McCloud Lake

Measurement by: Cornwall, Hansen, Kull

Altitude: 2816 m (9240 ft)

Latitude: +37,36,33

Longitude: -119,01,44

Record No. 0360

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.70	1.40E-01	1.21E+01	1.24E-01
5	580-706	25	0.82	1.64E-01	1.40E+01	1.11E-01
6	687-819	5	0.22	2.20E-01	1.69E+01	1.28E-01
7	767-974	5	0.37	3.70E-01	2.68E+01	1.30E-01

200

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1237 (Pacific Standard)

Site: West of Summit of Mammoth Pass
Measurement by: Cornwall, Hansen, Kull

Altitude: 2828 m (9280 ft)

Latitude: +37,36,45
Longitude: -119,02,11

Record No. 0361

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0362

Time: 1240 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.56E+02	1.59E+00
5	580-706	1	0.42	2.10E+00	1.79E+02	1.42E+00
6	687-819	1	0.38	1.90E+00	1.46E+02	1.11E+00
7	767-974	1	0.51	2.55E+00	1.85E+02	8.92E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1241 (Pacific Standard)

Site: West of Summit of Mammoth Pass

Measurement by: Cornwall, Hansen, Kull

Altitude: 2828 m (9280 ft)

Latitude: +37,36,45

Longitude: -119,02,11

Record No. 0363

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.74	1.48E-01	1.28E+01	1.31E-01
5	580-706	25	0.92	1.84E-01	1.57E+01	1.25E-01
6	687-819	5	0.20	2.00E-01	1.54E+01	1.17E-01
7	767-974	5	0.34	3.40E-01	2.46E+01	1.19E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

202

Date: 30 May 1977

Time: 1440 (Pacific Standard)

Site: On San Joaquin River North of Rainbow Falls
Measurement by: Cornwall, Hansen, Kull

Altitude: 2255 m (7400 ft)

Latitude: +37,36,29

Longitude: -119,04,49

Record No. 0364

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

Band	Bandpass (nm)	Gain	Scale	Voltage	Radiation	
					(Wm ⁻²)	(Wm ⁻² nm ⁻¹)
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.43	2.15E+00	1.84E+02	1.46E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0365

Time: 1442 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

Band	Bandpass (nm)	Gain	Scale	Voltage	Radiation	
					(Wm ⁻²)	(Wm ⁻² nm ⁻¹)
4	498-596	1	0.27	1.35E+00	1.17E+02	1.19E+00
5	580-706	1	0.32	1.60E+00	1.37E+02	1.08E+00
6	687-819	1	0.29	1.45E+00	1.12E+02	8.46E-01
7	767-974	1	0.41	2.05E+00	1.48E+02	7.17E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADICMETER, MCDL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1445 (Pacific Standard)

Site: On San Joaquin River North of Rainbow Falls
Measurement by: Cornwall, Hansen, Kull

Altitude: 2255 m (7400 ft)

Latitude: +37,36,29

Longitude: -119,04,49

Record No. 0366

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.44	8.80E-02	7.61E+00	7.77E-02
5	580-706	25	0.51	1.02E-01	8.72E+00	6.92E-02
6	687-819	25	0.90	1.80E-01	1.39E+01	1.05E-01
7	767-974	5	0.30	3.00E-01	2.17E+01	1.05E-01

204

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1620 (Pacific Standard)

Site: Devils Postpile Campground

Measurement by: Cornwall, Hansen, Kull

Altitude: 2316 m (7600 ft)

Latitude: +37,37,56

Longitude: -119,04,54

Record No. 0367

2 Pi Steradian Field of View (Diffuser)

(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.43E+02	1.45E+00
5	580-706	1	0.41	2.05E+00	1.75E+02	1.39E+00
6	687-819	1	0.37	1.85E+00	1.42E+02	1.08E+00
7	767-974	1	0.53	2.65E+00	1.92E+02	9.27E-01

Record No. 0368

Time: 1621 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)

(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.17	8.50E-01	7.34E+01	7.49E-01
5	580-706	1	0.18	9.00E-01	7.69E+01	6.10E-01
6	687-819	1	0.17	8.50E-01	6.54E+01	4.96E-01
7	767-974	1	0.21	1.05E+00	7.60E+01	3.67E-01

205

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1622 (Pacific Standard)

Site: Devils Postpile Campground

Measurement by: Cornwall, Hansen, Kull

Altitude: 2316 m (7600 ft)

Latitude: +37,37,56

Longitude: -119,04,54

Record No. 0369

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.31	6.20E-02	5.36E+00	5.47E-02
5	580-706	25	0.30	6.00E-02	5.13E+00	4.07E-02
6	687-819	25	0.70	1.40E-01	1.08E+01	8.17E-02
7	767-974	5	0.24	2.40E-01	1.74E+01	8.41E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1710 (Pacific Standard)

Site: Pumice Flat Campground

Measurement by: Cornwall, Hansen, Kull

Altitude: 2346 m (7700 ft)

Latitude: +37,38,56

Longitude: -119,04,25

Record No. 0370

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.38E+02	1.41E+00
5	580-706	1	0.40	2.00E+00	1.71E+02	1.36E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.55	2.75E+00	1.99E+02	9.62E-01

Record No. 0371

Time: 1712 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.63	6.30E-01	5.45E+01	5.56E-01
5	580-706	5	0.74	7.40E-01	6.32E+01	5.02E-01
6	687-819	5	0.65	6.50E-01	5.00E+01	3.79E-01
7	767-974	5	0.92	9.20E-01	6.67E+01	3.22E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1713 (Pacific Standard)

Site: Pumice Flat Campground

Measurement by: Cornwall, Hansen, Kull

Altitude: 2346 m (7700 ft)

Latitude: +37,38,56

Longitude: -119,04,25

Record No. 0372

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.32	6.40E-02	5.54E+00	5.65E-02
5	580-706	25	0.24	4.80E-02	4.10E+00	3.26E-02
6	687-819	25	0.28	5.60E-02	4.31E+00	3.27E-02
7	767-974	25	0.63	1.26E-01	9.13E+00	4.41E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 30 May 1977

Time: 1855 (Pacific Standard)

Site: On Devils Postpile Rd West of Minaret Summit
Measurement by: Cornwall, Hansen, Kull

Altitude: 2682 m (8800 ft)

Latitude: +37,39,47
Longitude: -119,03,46

Record No. 0373

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.59	5.90E-01	5.10E+01	5.21E-01
5	580-706	5	1.00	1.00E+00	8.54E+01	6.78E-01
6	687-819	1	0.23	1.15E+00	8.85E+01	6.71E-01
7	767-974	1	0.36	1.80E+00	1.30E+02	6.30E-01

Record No. 0374

Time: 1856 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	125	0.70	2.80E-02	2.42E+00	2.47E-02
5	580-706	125	0.56	2.24E-02	1.92E+00	1.52E-02
6	687-819	125	0.76	3.04E-02	2.34E+00	1.77E-02
7	767-974	25	0.25	5.00E-02	3.63E+00	1.75E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 0818 (Pacific Standard)

Site: Mammoth Crest Trail near Crystal Lake

Measurement by: Cornwall, Hansen, Kull

Altitude: 2947 m (9670 ft)

Latitude: +37,35,44

Longitude: -119,01,02

Record No. 0375

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.43	2.15E+00	1.84E+02	1.46E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.54	2.70E+00	1.95E+02	9.44E-01

Record No. 0376

Time: 0820 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.21	1.05E+00	9.07E+01	9.26E-01
5	580-706	1	0.24	1.20E+00	1.02E+02	8.13E-01
6	687-819	1	0.21	1.05E+00	8.08E+01	6.12E-01
7	767-974	1	0.29	1.45E+00	1.05E+02	5.07E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

216

Date: 31 May 1977

Time: 0822 (Pacific Standard)

Site: Mammoth Crest Trail near Crystal Lake
Measurement by: Cornwall, Hansen, Kull

Altitude: 2947 m (9670 ft)

Latitude: +37,35,44
Longitude: -119,01,02

Record No. 0377

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.34	6.80E-02	5.88E+00	6.00E-02
5	580-706	25	0.35	7.00E-02	5.98E+00	4.75E-02
6	687-819	25	0.64	1.28E-01	9.86E+00	7.47E-02
7	767-974	5	0.25	2.50E-01	1.81E+01	8.76E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

211

Date: 31 May 1977

Time: 0924 (Pacific Standard)

Site: Mammoth Crest Northwest of Pt 10601
Measurement by: Cornwall, Hansen, Kull

Altitude: 3224 m (10580 ft)

Latitude: +37,35,00
Longitude: -119,01,17

Record No. 0378

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

Band	Bandpass (nm)	Gain	Scale	Voltage	Radiation	
					(Wm ⁻²)	(Wm ⁻² nm ⁻¹)
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0379

Time: 0925 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

Band	Bandpass (nm)	Gain	Scale	Voltage	Radiation	
					(Wm ⁻²)	(Wm ⁻² nm ⁻¹)
4	498-596	1	0.30	1.50E+00	1.30E+02	1.32E+00
5	580-706	1	0.36	1.80E+00	1.54E+02	1.22E+00
6	687-819	1	0.32	1.60E+00	1.23E+02	9.33E-01
7	767-974	1	0.43	2.15E+00	1.56E+02	7.52E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 0926 (Pacific Standard)

Site: Mammoth Crest Northwest of Pt 10601

Measurement by: Cornwall, Hansen, Kull

Altitude: 3224 m (10580 ft)

Latitude: +37,35,00

Longitude: -119,01,17

Record No. 0380

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.64	1.28E-01	1.11E+01	1.13E-01
5	580-706	25	0.62	1.24E-01	1.06E+01	8.41E-02
6	687-819	25	0.49	9.80E-02	7.55E+00	5.72E-02
7	767-974	25	0.67	1.34E-01	9.71E+00	4.69E-02

Record No. 0381

Time: 0930 (Pacific Standard)

15° Field of View (Plane Glass)
(Overhead sky radiation)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.77	1.54E-01	6.16E+00	6.29E-02
5	580-706	25	0.58	1.16E-01	4.67E+00	3.71E-02
6	687-819	25	0.30	6.00E-02	2.43E+00	1.84E-02
7	767-974	25	0.31	6.20E-02	2.52E+00	1.22E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 1022 (Pacific Standard)

Site: Southeast End Mammoth Crest on Pt 11348

Measurement by: Cornwall, Hansen, Kull

Altitude: 3458 m (11348 ft)

Latitude: +37,34,29

Longitude: -119,00,17

Record No. 0382

15° Field of View (Plane Glass)
(Overhead sky radiation)

Band	Bandpass (nm)	Gain	Scale	Voltage	Radiation	
					(Wm ⁻²)	(Wm ⁻² nm ⁻¹)
4	498-596	25	0.98	1.96E-01	7.84E+00	8.00E-02
5	580-706	25	0.76	1.52E-01	6.12E+00	4.86E-02
6	687-819	25	0.42	8.40E-02	3.41E+00	2.58E-02
7	767-974	25	0.43	8.60E-02	3.50E+00	1.69E-02

Record No. 0383

Time: 1025 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

Band	Bandpass (nm)	Gain	Scale	Voltage	Radiation	
					(Wm ⁻²)	(Wm ⁻² nm ⁻¹)
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.52	2.60E+00	1.88E+02	9.09E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 1027 (Pacific Standard)

Site: Southeast End Mammoth Crest on Pt 11348

Measurement by: Cornwall, Hansen, Kull

Altitude: 3458 m (11348 ft)

Latitude: +37,34,29

Longitude: -119,00,17

Record No. 0384

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.38E+02	1.41E+00
5	580-706	1	0.37	1.85E+00	1.58E+02	1.25E+00
6	687-819	1	0.33	1.65E+00	1.27E+02	9.62E-01
7	767-974	1	0.45	2.25E+00	1.63E+02	7.87E-01

Record No. 0385

Time: 1028 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.85	1.70E-01	1.47E+01	1.50E-01
5	580-706	25	0.81	1.62E-01	1.39E+01	1.10E-01
6	687-819	25	0.89	1.78E-01	1.37E+01	1.04E-01
7	767-974	5	0.23	2.30E-01	1.67E+01	8.06E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 1140 (Pacific Standard)

Site: Southeast End Mammoth Crest on Pt 11348
Measurement by: Cornwall, Hansen, Kull

Altitude: 3458 m (11348 ft)

Latitude: +37,34,29

Longitude: -119,00,17

Record No. 0386

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.37	1.85E+00	1.60E+02	1.63E+00
5	580-706	1	0.45	2.25E+00	1.92E+02	1.52E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0387

Time: 1141 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.42	2.10E+00	1.79E+02	1.42E+00
6	687-819	1	0.37	1.85E+00	1.42E+02	1.08E+00
7	767-974	1	0.52	2.60E+00	1.88E+02	9.09E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 1142 (Pacific Standard)

Site: Southeast End Mammoth Crest on Pt 11348

Measurement by: Cornwall, Hansen, Kull

Altitude: 3458 m (11348 ft)

Latitude: +37,34,29

Longitude: -119,00,17

Record No. 0388

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.24	2.40E-01	2.08E+01	2.12E-01
5	580-706	5	0.24	2.40E-01	2.05E+01	1.63E-01
6	687-819	5	0.22	2.20E-01	1.69E+01	1.28E-01
7	767-974	5	0.32	3.20E-01	2.32E+01	1.12E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 1259 (Pacific Standard)

Site: Above South Shore of T J Lake
Measurement by: Cornwall, Hansen, Kull

Altitude: 2816 m (9240 ft)

Latitude: +37,35,25
Longitude: -119,00,25

Record No. 0389

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.36	1.80E+00	1.56E+02	1.59E+00
5	580-706	1	0.44	2.20E+00	1.88E+02	1.49E+00
6	687-819	1	0.40	2.00E+00	1.54E+02	1.17E+00
7	767-974	1	0.56	2.80E+00	2.03E+02	9.79E-01

Record No. 0390

Time: 1300 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.43E+02	1.45E+00
5	580-706	1	0.39	1.95E+00	1.67E+02	1.32E+00
6	687-819	1	0.36	1.80E+00	1.39E+02	1.05E+00
7	767-974	1	0.49	2.45E+00	1.77E+02	8.57E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

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Date: 31 May 1977

Time: 1301 (Pacific Standard)

Site: Above South Shore of T J Lake
Measurement by: Cornwall, Hansen, Kull

Altitude: 2816 m (9240 ft)

Latitude: +37,35,25

Longitude: -119,00,25

Record No. 0391

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.53	1.06E-01	9.17E+00	9.36E-02
5	580-706	25	0.56	1.12E-01	9.58E+00	7.60E-02
6	687-819	25	0.85	1.70E-01	1.31E+01	9.92E-02
7	767-974	5	0.30	3.00E-01	2.17E+01	1.05E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 1420 (Pacific Standard)

Site: East Shore Lake George at Outflow
Measurement by: Cornwall, Hansen, Kull

Altitude: 2745 m (9008 ft)

Latitude: +37,36,04

Longitude: -119,00,29

Record No. 0392

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.51E+02	1.54E+00
5	580-706	1	0.43	2.15E+00	1.84E+02	1.46E+00
6	687-819	1	0.39	1.95E+00	1.50E+02	1.14E+00
7	767-974	1	0.55	2.75E+00	1.99E+02	9.62E-01

Record No. 0393

Time: 1422 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.28	1.40E+00	1.21E+02	1.23E+00
5	580-706	1	0.35	1.75E+00	1.49E+02	1.19E+00
6	687-819	1	0.31	1.55E+00	1.19E+02	9.04E-01
7	767-974	1	0.43	2.15E+00	1.56E+02	7.52E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3459

Date: 31 May 1977

Time: 1424 (Pacific Standard)

Site: East Shore Lake George at Outflow
Measurement by: Cornwall, Hansen, Kull

Altitude: 2745 m (9008 ft)

Latitude: +37,36,04

Longitude: -119,00,29

Record No. 0394

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.45	9.00E-02	7.78E+00	7.94E-02
5	580-706	25	0.51	1.02E-01	8.72E+00	6.92E-02
6	687-819	25	0.80	1.60E-01	1.23E+01	9.33E-02
7	767-974	5	0.27	2.70E-01	1.96E+01	9.46E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 30 May 1977

Time: 1210 (Pacific Standard)

Site: Crystal Lake Outflow

Measurement by: Jumar Gene et al

Altitude: 2941 m (9650 ft)

Latitude: +37,35,36

Longitude: -119,01,03

Record No. 0395

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.34	1.70E+00	1.49E+02	1.52E+00
5	580-706	1	0.48	2.40E+00	1.92E+02	1.53E+00
6	687-819	1	0.43	2.15E+00	1.61E+02	1.22E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0396

Time: 1213 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.40E+02	1.43E+00
5	580-706	1	0.46	2.30E+00	1.84E+02	1.46E+00
6	687-819	1	0.37	1.85E+00	1.39E+02	1.05E+00
7	767-974	1	0.51	2.55E+00	1.84E+02	8.89E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

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Date: 30 May 1977

Time: 1215 (Pacific Standard)

Site: Crystal Lake Outflow

Measurement by: Jumar Gene et al

Altitude: 2941 m (9650 ft)

Latitude: +37,35,36

Longitude: -119,01,03

Record No. 0397

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.53	1.06E-01	9.27E+00	9.46E-02
5	580-706	25	0.74	1.48E-01	1.18E+01	9.40E-02
6	687-819	25	0.95	1.90E-01	1.42E+01	1.08E-01
7	767-974	5	0.38	3.80E-01	2.74E+01	1.33E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 30 May 1977

Time: 1335 (Pacific Standard)

Site: Mammoth Crest Trail between Crystal Lake and Mammoth Cr
Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 3151 m (10340 ft)

Latitude: +37,35,36

Longitude: -119,01,24

Record No. 0398

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.34	1.70E+00	1.49E+02	1.52E+00
5	580-706	1	0.47	2.35E+00	1.88E+02	1.50E+00
6	687-819	1	0.42	2.10E+00	1.57E+02	1.19E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0399

Time: 1337 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.28	1.40E+00	1.23E+02	1.25E+00
5	580-706	1	0.39	1.95E+00	1.56E+02	1.24E+00
6	687-819	1	0.37	1.85E+00	1.39E+02	1.05E+00
7	767-974	1	0.45	2.25E+00	1.62E+02	7.85E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDEL 100-A, SERIAL NO. 3467

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Date: 30 May 1977

Time: 1338 (Pacific Standard)

Site: Mammoth Crest Trail between Crystal Lake and Mammoth Cr
Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 3151 m (10340 ft)

Latitude: +37,35,36

Longitude: -119,01,24

Record No. 0400

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.63	1.26E-01	1.10E+01	1.12E-01
5	580-706	25	0.68	1.36E-01	1.09E+01	8.63E-02
6	687-819	25	0.70	1.40E-01	1.05E+01	7.95E-02
7	767-974	25	0.85	1.70E-01	1.22E+01	5.91E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 30 May 1977

Time: 1444 (Pacific Standard)

Site: Mammoth Crest and Mcno-Madera-Presno Co Corners
Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 3224 m (10580 ft)

Latitude: +37,35,10
Longitude: -119,01,20

Record No. 0401

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.48	2.40E+00	1.92E+02	1.53E+00
6	687-819	1	0.42	2.10E+00	1.57E+02	1.19E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0402

Time: 1446 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.24	1.20E+00	1.05E+02	1.07E+00
5	580-706	1	0.33	1.65E+00	1.32E+02	1.05E+00
6	687-819	1	0.28	1.40E+00	1.05E+02	7.95E-01
7	767-974	1	0.34	1.70E+00	1.23E+02	5.93E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

228

Date: 30 May 1977

Time: 1448 (Pacific Standard)

Site: Mammoth Crest and Mcno-Madera-Fresno Co Corners

Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 3224 m (10580 ft)

Latitude: +37,35,10

Longitude: -119,01,20

Record No. 0403

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.60	1.20E-01	1.05E+01	1.07E-01
5	580-706	25	0.62	1.24E-01	9.92E+00	7.87E-02
6	687-819	25	0.48	9.60E-02	7.20E+00	5.45E-02
7	767-974	25	0.53	1.06E-01	7.63E+00	3.69E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 30 May 1977

Time: 1510 (Pacific Standard)

Site: Mammoth Crest at Pt 10601

Measurement by: Jumar Gene, Eggett, Tennant, et al

Altitude: 3231 m (10601 ft)

Latitude: +37,34,57

Longitude: -119,01,16

Record No. 0404

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.35	1.75E+00	1.53E+02	1.56E+00
5	580-706	1	0.48	2.40E+00	1.92E+02	1.53E+00
6	687-819	1	0.44	2.20E+00	1.65E+02	1.25E+00
7	767-974	1	0.59	2.95E+00	2.13E+02	1.03E+00

Record No. 0405

Time: 1512 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.22	1.10E+00	9.64E+01	9.83E-01
5	580-706	1	0.29	1.45E+00	1.16E+02	9.23E-01
6	687-819	1	0.24	1.20E+00	9.00E+01	6.82E-01
7	767-974	1	0.29	1.45E+00	1.05E+02	5.06E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MCDEL 100-A, SERIAL NO. 3467

Date: 30 May 1977

Time: 1514 (Pacific Standard)

Site: Mammoth Crest at Pt 10601

Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 3231 m (10601 ft)

Latitude: +37,34,57

Longitude: -119,01,16

Record No. 0406

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

Band	Bandpass (nm)	Gain	Scale	Voltage	Radiation	
					(Wm ⁻²)	(Wm ⁻² nm ⁻¹)
4	498-596	25	0.66	1.32E-01	1.15E+01	1.18E-01
5	580-706	25	0.67	1.34E-01	1.07E+01	8.51E-02
6	687-819	25	0.77	1.54E-01	1.15E+01	8.75E-02
7	767-974	25	0.73	1.46E-01	1.05E+01	5.08E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 30 May 1977

Time: 1605 (Pacific Standard)

Site: Mammoth Crest North of Trail

Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 3182 m (10440 ft)

Latitude: +37,35,34

Longitude: -119,01,35

Record No. 0407

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

Radiation

4	498-596	1	0.32	1.60E+00	1.40E+02	1.43E+00
5	580-706	1	0.46	2.30E+00	1.84E+02	1.46E+00
6	687-819	1	0.42	2.10E+00	1.57E+02	1.19E+00
7	767-974	1	0.56	2.80E+00	2.02E+02	9.77E-01

Record No. 0408

Time: 1606 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.18	9.00E-01	7.88E+01	8.04E-01
5	580-706	1	0.23	1.15E+00	9.22E+01	7.32E-01
6	687-819	1	0.22	1.10E+00	8.25E+01	6.25E-01
7	767-974	1	0.24	1.20E+00	8.66E+01	4.19E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

232

Date: 30 May 1977

Time: 1608 (Pacific Standard)

Site: Mammoth Crest North of Trail

Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 3182 m (10440 ft)

Latitude: +37,35,34

Longitude: -119,01,35

Record No. 0409

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.40	8.00E-02	7.00E+00	7.14E-02
5	580-706	25	0.3	6.00E-02	4.80E+00	3.81E-02
6	687-819	25	0.25	5.00E-02	3.75E+00	2.84E-02
7	767-974	25	0.53	1.06E-01	7.63E+00	3.69E-02

233

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 30 May 1977

Time: 1724 (Pacific Standard)

Site: Safeway Parking Lot, Mammoth Lakes

Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 2386 m (7830 ft)

Latitude: +37,38,48

Longitude: -118,57,58

Record No. 0410

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.26	1.30E+00	1.14E+02	1.16E+00
5	580-706	1	0.40	2.00E+00	1.60E+02	1.27E+00
6	687-819	1	0.38	1.90E+00	1.42E+02	1.08E+00
7	767-974	1	0.52	2.60E+00	1.88E+02	9.07E-01

Record No. 0411

Time: 1726 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	5	0.30	3.00E-01	2.63E+01	2.68E-01
5	580-706	25	0.23	4.60E-02	3.68E+00	2.92E-02
6	687-819	5	0.36	3.60E-01	2.70E+01	2.05E-01
7	767-974	25	0.22	4.40E-02	3.17E+00	1.53E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

234

Date: 30 May 1977

Time: 1728 (Pacific Standard)

Site: Safeway Parking Lot, Mammoth Lakes

Measurement by: Jumar Gene, Baggett, Tennant, et al

Altitude: 2386 m (7830 ft)

Latitude: +37,38,48

Longitude: -118,57,58

Record No. 0412

2 Pi Steradian Field of View (Diffuser)

(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.30	6.00E-02	5.25E+00	5.36E-02
5	580-706	25	0.24	4.80E-02	3.84E+00	3.05E-02
6	687-819	25	0.20	4.00E-02	3.00E+00	2.27E-02
7	767-974	25	0.19	3.80E-02	2.74E+00	1.32E-02

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

235

Date: 31 May 1977

Time: 0843 (Pacific Standard)

Site: Valentine Reserve - Hill NW of University Cabin

Measurement by: ?

Altitude: 2459 m (8070 ft)

Latitude: +37,37,48

Longitude: -118,59,42

Record No. 0413

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.40E+02	1.43E+00
5	580-706	1	0.46	2.30E+00	1.84E+02	1.46E+00
6	687-819	1	0.42	2.10E+00	1.57E+02	1.19E+00
7	767-974	1	0.56	2.80E+00	2.02E+02	9.77E-01

Record No. 0414

Time: 0845 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.23	1.15E+00	1.01E+02	1.03E+00
5	580-706	1	0.33	1.65E+00	1.32E+02	1.05E+00
6	687-819	1	0.27	1.35E+00	1.01E+02	7.67E-01
7	767-974	1	0.34	1.70E+00	1.23E+02	5.93E-01

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 31 May 1977

Time: 0848 (Pacific Standard)

Site: Valentine Reserve - Hill NW of University Cabin
Measurement by: ?

Altitude: 2459 m (8070 ft)

Latitude: +37,37,48

Longitude: -118,59,42

Record No. 0415

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.39	7.80E-02	6.82E+00	6.96E-02
5	580-706	25	0.45	9.00E-02	7.20E+00	5.71E-02
6	687-819	25	0.54	1.08E-01	8.10E+00	6.14E-02
7	767-974	25	0.76	1.52E-01	1.09E+01	5.29E-02

237

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 31 May 1977

Time: 0925 (Pacific Standard)

Site: Valentine Reserve - in Meadow
Measurement by: ?

Altitude: 2462 m (8080 ft)

Latitude: +37,37,55
Longitude: -118,59,33

Record No. 0416

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.45E+02	1.47E+00
5	580-706	1	0.47	2.35E+00	1.88E+02	1.50E+00
6	687-819	1	0.41	2.05E+00	1.54E+02	1.16E+00
7	767-974	1	0.56	2.80E+00	2.02E+02	9.77E-01

Record No. 0417

Time: 0928 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.28	1.40E+00	1.23E+02	1.25E+00
5	580-706	1	0.38	1.90E+00	1.52E+02	1.21E+00
6	687-819	1	0.32	1.60E+00	1.20E+02	9.09E-01
7	767-974	1	0.39	1.95E+00	1.41E+02	6.80E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

238

Date: 31 May 1977

Time: 0930 (Pacific Standard)

Site: Valentine Reserve - in Meadow

Measurement by: ?

Altitude: 2462 m (8080 ft)

Latitude: +37,37,55

Longitude: -118,59,33

Record No. 0418

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.42	8.40E-02	7.35E+00	7.50E-02
5	580-706	25	0.53	1.06E-01	8.48E+00	6.73E-02
6	687-819	25	0.74	1.48E-01	1.11E+01	8.41E-02
7	767-974	5	0.22	2.20E-01	1.59E+01	7.67E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 31 May 1977

Time: 1018 (Pacific Standard)

Site: Valentine Reserve - Hill NW of University Cabin
Measurement by: ?

Altitude: 2459 m (8070 ft)

Latitude: +37,37,48

Longitude: -118,59,42

Record No. 0419

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.40E+02	1.43E+00
5	580-706	1	0.46	2.30E+00	1.84E+02	1.46E+00
6	687-819	1	0.41	2.05E+00	1.54E+02	1.16E+00
7	767-974	1	0.56	2.80E+00	2.02E+02	9.77E-01

Record No. 0420

Time: 1020 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.29	1.45E+00	1.27E+02	1.30E+00
5	580-706	1	0.40	2.00E+00	1.60E+02	1.27E+00
6	687-819	1	0.35	1.75E+00	1.31E+02	9.94E-01
7	767-974	1	0.44	2.20E+00	1.59E+02	7.67E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

240

Date: 31 May 1977

Time: 1023 (Pacific Standard)

Site: Valentine Reserve - Hill NW of University Cabin
Measurement by: ?

Altitude: 2459 m (8070 ft)

Latitude: +37,37,48
Longitude: -118,59,42

Record No. 0421

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.43	8.60E-02	7.52E+00	7.68E-02
5	580-706	25	0.55	1.10E-01	8.80E+00	6.98E-02
6	687-819	25	0.75	1.50E-01	1.13E+01	8.52E-02
7	767-974	5	0.21	2.10E-01	1.52E+01	7.32E-02

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SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 31 May 1977

Time: 1139 (Pacific Standard)

Site: McCloud Lake, Northeast End

Measurement by: Jumar Gene et al

Altitude: 2816 m (9240 ft)

Latitude: +37,36,33

Longitude: -119,01,44

Record No. 0422

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.45E+02	1.47E+00
5	580-706	1	0.48	2.40E+00	1.92E+02	1.53E+00
6	687-819	1	0.43	2.15E+00	1.61E+02	1.22E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0423

Time: 1141 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.32	1.60E+00	1.40E+02	1.43E+00
5	580-706	1	0.46	2.30E+00	1.84E+02	1.46E+00
6	687-819	1	0.41	2.05E+00	1.54E+02	1.16E+00
7	767-974	1	0.56	2.80E+00	2.02E+02	9.77E-01

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

242

Date: 31 May 1977

Time: 1144 (Pacific Standard)

Site: McCloud Lake, Northeast End

Measurement by: Jumar Gene et al

Altitude: 2816 m (9240 ft)

Latitude: +37,36,33

Longitude: -119,01,44

Record No. 0424

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	25	0.80	1.60E-01	1.40E+01	1.43E-01
5	580-706	5	0.21	2.10E-01	1.68E+01	1.34E-01
6	687-819	5	0.24	2.40E-01	1.80E+01	1.36E-01
7	767-974	5	0.31	3.10E-01	2.24E+01	1.08E-01

243

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 31 May 1977

Time: 1350 (Pacific Standard)

Site: 100 m East of Mammoth Pass

Measurement by: Jumar Gene et al

Altitude: 2834 m (9300 ft)

Latitude: +37,36,39

Longitude: -119,01,55

Record No. 0425

2 Pi Steradian Field of View (Diffuser)
(Surface normal to sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.33	1.65E+00	1.45E+02	1.47E+00
5	580-706	1	0.47	2.35E+00	1.88E+02	1.50E+00
6	687-819	1	0.42	2.10E+00	1.57E+02	1.19E+00
7	767-974	1	0.58	2.90E+00	2.09E+02	1.01E+00

Record No. 0426

Time: 1352 (Pacific Standard)

2 Pi Steradian Field of View (Diffuser)
(Horizontal surface)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²nm⁻¹)</u>
4	498-596	1	0.30	1.50E+00	1.31E+02	1.34E+00
5	580-706	1	0.43	2.15E+00	1.72E+02	1.37E+00
6	687-819	1	0.39	1.95E+00	1.46E+02	1.11E+00
7	767-974	1	0.49	2.45E+00	1.77E+02	8.55E-01

242

SOLAR RADIATION MEASUREMENTS WITH LANDSAT GROUND
TRUTH RADIOMETER, MODEL 100-A, SERIAL NO. 3467

Date: 31 May 1977

Time: 1354 (Pacific Standard)

Site: 100 m East of Mammoth Pass

Measurement by: Jumar Gene et al

Altitude: 2834 m (9300 ft)

Latitude: +37,36,39

Longitude: -119,01,55

Record No. 0427

2 Pi Steradian Field of View (Diffuser)
(Surface away from sun)

<u>Band</u>	<u>Bandpass (nm)</u>	<u>Gain</u>	<u>Scale</u>	<u>Voltage</u>	<u>Radiation</u>	
					<u>(Wm⁻²)</u>	<u>(Wm⁻²cm⁻¹)</u>
4	498-596	25	0.56	1.12E-01	9.80E+00	1.00E-01
5	580-706	25	0.75	1.50E-01	1.20E+01	9.52E-02
6	687-819	5	0.21	2.10E-01	1.57E+01	1.19E-01
7	767-974	5	0.33	3.30E-01	2.38E+01	1.15E-01

Appendix 3

Field Data for the Longwave Radiation Model

The following data are from field measurements taken during the 1976-77 snow season. The data were collected to drive and test the longwave radiation model discussed in Section 3 of the test. Measurements were taken of the following parameters:

Parameter	Instrument
Air Temperature	Sling Psychrometer
Wet Bulb Temperature	Sling Psychrometer
Surface Temperature	Dial Stem Thermometer
Incoming Longwave Radiation	Eppley Pyrgeometer

A few measurements of net radiation were taken using a Thornthwaite Net Radiometer. Cloud cover was estimated by the observer and a description of the weather was included.

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LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 1 WITH 3 MEMBERS

SURVEY AREA: KEARSARGE PASS

MEMBERS: (TRIP LEADER FIRST)
JEFF DOZIER
DANNY MARKS
JOHN MARKS

SURVEY DATES: 2/12-14/1977 LASTING 3 DAY(S)
8 SITES WERE SURVEYED WITH 10 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

NO LONGWAVE RADIATION MEASUREMENTS; TEMP AND WET BULB
TEMP ONLY. CLEAR WEATHER FOR THE WHOLE TRIP

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SITE # 1 AT LATITUDE 364628 LONGITUDE -1182013 ELEVATION 2788.9 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
END OF THE UNION VALLEY ROAD

SITE DESCRIPTION:
ON ROAD, WITH SPARSE TREES

RECORD # 1

DATE: 2/12/77 TIME: 8:45

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
276.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 W	999.0 W/M**2	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

248

SITE # 2 AT LATITUDE 364615 LONGITUDE -1182054 ELEVATION 3023.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ABOVE ONION VALLEY ON KEARSARGE PASS TRAIL

SITE DESCRIPTION:
OPEN AREA AWAY FROM TREES

RECORD # 1

DATE: 2/12/77 TIME: 10:18

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	276.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

249

SITE # 3 AT LATITUDE 364617 LONGITUDE -1182150 ELEVATION 3337.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
JUST ABOVE HEART LAKE

SITE DESCRIPTION:
IN A CLEARING

RECORD # 1

DATE: 2/12/77 TIME: 13:36

RECORDER(S) :
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
999.	999.	271.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2
	0.000	

'999.0' INDICATES MISSING DATA.

250

SITE # 4 AT LATITUDE 364624 LONGITUDE -1182211 ELEVATION 3505.2 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
BELOW LITTLE POTHOLE LAKE

SITE DESCRIPTION:
OPEN AREA; NO TREES

RECORD # 1

DATE: 2/12/77 TIME: 14:52

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
278.	276.	270.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

251

SITE # 5 AT LATITUDE 364622 LONGITUDE -1182232 ELEVATION 3603.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
KEARSARGE PASS CREST

SITE DESCRIPTION:
OPEN AREA; NO TREES

RECORD # 1

DATE: 2/12/77 TIME: 16:33

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
275.	272.	270.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 W	999.0 W/M**2	0.000
		999.0 W/M**2

'999.0' INDICATES MISSING DATA.

252

SITE # 6 AT LATITUDE 364608 LONGITUDE -1182300 ELEVATION 3337.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
UPPER KEARSARGE LAKE

SITE DESCRIPTION:
OPEN AREA, CANYON BOTTOM, ON LAKE SURFACE

RECORD # 1

DATE: 2/13/77 TIME: 10:15

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR; COULD BE UNDER AN INVERSION

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
279.	273.	269.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.000
		999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 7 AT LATITUDE 364622 LONGITUDE -1182308 ELEVATION 3404.6 M
TOTAL RECORDS THIS SITE: 3

LOCATION DESCRIPTION:
HIGH CAMP ABOVE KEARSARGE LAKES

SITE DESCRIPTION:
SPARSE TREE COVER

RECORD # 1

DATE: 2/13/77 TIME: 13: 0

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
280.	275.	272.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.000
		999.0 W/M**2

RECORD # 2

DATE: 2/13/77 TIME: 16:50

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
276.	272.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.000
		999.0 W/M**2

RECORD # 3

DATE: 2/14/77 TIME: 8:13

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
275.	272.	268.
PYRGEOMETEP READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.000
		999.0 W/M**2

254
SITE # 8 AT LATITUDE 364618 LONGITUDE -1182410 ELEVATION 3200.4 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON BULLFROG LAKE

SITE DESCRIPTION:
OPEN; NO TREES

RECORD # 1

DATE: 2/13/77 TIME: 14:37

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
281.	277.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2
	0.000	

'999.0' INDICATES MISSING DATA.

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LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 2 WITH 2 MEMBERS

SURVEY AREA: MAMMOTH MOUNTAIN

MEMBERS: (TRIP LEADER FIRST)
DANNY MARKS
RICK HOFFMAN

SURVEY DATES: 2/23-23/1977 LASTING 1 DAY(S)
3 SITES WERE SURVEYED WITH 3 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

NET RADIATION MEASUREMENTS WERE TAKEN ALONG WITH AIR TEMP AND
WET BULB TEMP. MEASUREMENTS TAKEN DURING AN INTENSE SNOW STORM

SITE # 1 AT LATITUDE 373759 LONGITUDE -1190141 ELEVATION 3169.9 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
TOP OF CHAIR FIVE

SITE DESCRIPTION:
OPEN AREA ON RIDGE TOP

RECORD # 1

DATE: 2/33/77 TIME: 11:30

RECORDER(S):
DANNY MARKS
RICK HOFFMAN

SITE COMMENTS:

SNOWING REALLY HARD; INSIDE CLOUD, WIND
ALMOST TOO STRONG TO STAND IN

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
269.	269.	263.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	67.7 W/M**2

'999.0' INDICATES MISSING DATA.

257

SITE # 2 AT LATITUDE 373816 LONGITUDE -1190128 ELEVATION 2926.1 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
BOTTOM OF CHAIR FIVE

SITE DESCRIPTION:
IN GULLY SOME TREES

RECORD # 1

DATE: 2/23/77 TIME: 11:49

RECORDER(S):
DANNY MARKS
RICK HOFFMAN

SITE COMMENTS:

SNOWING REALLY HARD, STILL INSIDE CLOUD
NOT SO WINDY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
270.	270.	270.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	1.000
		-24.4 W/M**2

'999.0' INDICATES MISSING DATA.

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258

SITE # 3 AT LATITUDE 373907 LONGITUDE -1190207 ELEVATION 2731.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
BY MAMMOTH LODGE

SITE DESCRIPTION:
OPEN AREA, IN PARKING LOT

RECORD # 1

DATE: 2/23/77 TIME: 12:42

RECORDER(S):
DANNY MARKS
RICK HOFFMAN

SITE COMMENTS:

STILL SNOWING HARD, BELOW CLOUD
BOTTOMS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
270.	270.	272.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	1.000
		-3.5 W/M**2

'999.0' INDICATES MISSING DATA.

LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 3 WITH 3 MEMBERS

SURVEY AREA: KEARSARGE PASS-FORRESTER PASS

MEMBERS: (TRIP LEADER FIRST)

JEFF DOZIER

DANNY MARKS

STEVE GERDSEN

SURVEY DATES: 3/18-22/1977 LASTING 5 DAY(S)

7 SITES WERE SURVEYED WITH 8 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

NO LONGWAVE RADIATION MEASUREMENTS TAKEN
AIR TEMP AND WET BULB ONLY

260
SITE # 1 AT LATITUDE 364250 LONGITUDE -1182151 ELEVATION 3490.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
BUBBS CREEK BELOW FORRESTER PASS

SITE DESCRIPTION:
OPEN AREA, NO TREES

RECORD # 1

DATE: 3/20/77 TIME: 10:17

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	271.	271.
LARGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 MV 999.0 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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261

SITE # 2 AT LATITUDE 364203 LONGITUDE -1182218 ELEVATION 3877.1 M
TOTAL RECORDS THIS SITE: 2

LOCATION DESCRIPTION:
HIGH CAMP JUST BELOW FORRESTER PASS

SITE DESCRIPTION:
OPEN AREA ON RIDGE TOP

RECORD # 1

DATE: 3/21/77 TIME: 8:48

RECORDER(S) :
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	272.	268.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2
	0.000	

RECORD # 2

DATE: 3/21/77 TIME: 10:15

RECORDER(S) :
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
278.	273.	270.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2
	0.000	

'999.0' INDICATES MISSING DATA.

262

SITE # 3 AT LATITUDE 364219 LONGITUDE -1182213 ELEVATION 3657.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
BELOW HIGH CAMP ON SHORT CUT ROUTE

SITE DESCRIPTION:
OPEN AREA, REALLY GOOD SKIING

RECORD # 1

DATE: 3/21/77 TIME: 12:55

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
284.	277.	271.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2
	0.000	

'999.0' INDICATES MISSING DATA.

SITE # 4 AT LATITUDE 364420 LONGITUDE -1182255 ELEVATION 3133.3 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
EAST VIDETTE MEADOW

SITE DESCRIPTION:
OPEN AREA, SOME TREES

RECORD # 1

DATE: 3/21/77 TIME: 14:57

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
280.	273.	273.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2
	0.000	

'999.0' INDICATES MISSING DATA.

264

SITE # 5 AT LATITUDE 364541 LONGITUDE -1182423 ELEVATION 2950.5 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
VIDETTE MEADOW FOREST

SITE DESCRIPTION:
IN OPEN FOREST

RECORD # 1

DATE: 3/22/77 TIME: 10:20

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
284.	277.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 W	999.0 W/M**2	0.000
		999.0 W/M**2

'999.0' INDICATES MISSING DATA.

265

SITE # 6 AT LATITUDE 364617 LONGITUDE -1182409 ELEVATION 3200.4 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON BULLFROG LAKE

SITE DESCRIPTION:
OPEN AREA

RECORD # 1

DATE: 3/22/77 TIME: 12:50

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
279.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.000
		999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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266

SITE # 7 AT LATITUDE 364622 LONGITUDE -1182232 ELEVATION 3603.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
KEARSARGE PASS

SITE DESCRIPTION:
OPEN

RECORD # 1

DATE: 3/22/77 TIME: 15:17

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

SUDDEN CLOUDS; BEGINNING TO SNOW

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
275.	272.	270.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2
	0.850	

'999.0' INDICATES MISSING DATA.

LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 4 WITH 5 MEMBERS

SURVEY AREA: MAMMOTH MOUNTAIN

MEMBERS: (TRIP LEADER FIRST)

DANNY MARKS
JIM FREW
TARA HARDOIN
MIKE GROVES
RALPH MILLIFF

SURVEY DATES: 4/13-14/1977 LASTING 2 DAY(S)
14 SITES WERE SURVEYED WITH 16 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

LONGWAVE RADIATION MEASUREMENTS TAKEN WITH BOTH NET RADIOMETER
AND PYRGEOMETER. CLOUDY WITH SNOWFLURRIES FIRST DAY, CLEAR SECOND

268

SITE # 1 AT LATITUDE 373905 LONGITUDE -1190203 ELEVATION 2731.0 M
TOTAL RECORDS THIS SITE: 2

LOCATION DESCRIPTION:
BY MAMMOTH LODGE

SITE DESCRIPTION:
IN PARKING LOT

RECORD # 1

DATE: 4/13/77 TIME: 10:30

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

THIN CLOUDS, NO SNOW YET

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
282.	276.	291.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.8 mV 328.4 W/M**2	0.180	999.0 W/M**2

RECORD # 2

DATE: 4/13/77 TIME: 10:25

RECORDER(S):
TARA HARDOIN
MIKE GROVES
RALPH MILLIFF

SITE COMMENTS:

THIN CLOUD COVER

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
282.	278.	291.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	0.180	627.9 W/M**2

'999.0' INDICATES MISSING DATA.

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269

SITE # 2 AT LATITUDE 373826 LONGITUDE -1190159 ELEVATION 2974.8 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
TOP OF CHAIR ONE

SITE DESCRIPTION:
OPEN AREA, A FEW TREES NEARBY

RECORD # 1

DATE: 4/13/77 TIME: 12:19

RECORDER(S) :
DANNY MARKS
JIM FREW

SITE COMMENTS:

THIN CLOUDS, LIGHT SNOW
BELOW CLOUD BOTTOMS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
275.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 271.2 W/M**2	0.650	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 3 AT LATITUDE 373802 LONGITUDE -1190202 ELEVATION 3182.1 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
BACKSIDE OF CHAIR 3

SITE DESCRIPTION:
ON A STEEP SLOPE IN GULLY; NO TREES

RECORD # 1

DATE: 4/13/77 TIME: 13: 2

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

FULL CLOUD COVER, LIGHT SNOW
BELOW CLOUD BOTTOMS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	272.	273.
PYRGECMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 265.7 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

271

SITE # 4 AT LATITUDE 372837 LONGITUDE -1190220 ELEVATION 2956.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
HALFWAY DOWN SAN ANTON

SITE DESCRIPTION:
FLAT OPEN AREA

RECORD # 1

DATE: 4/13/77 TIME: 13:42

RECORDER(S) :
DANNY MARKS
JIM PREW

SITE COMMENTS:

SPARSE CLOUD COVER, LIGHT SNOW
PYRG. READING IS AN AVERAGE BETWEEN CLOUD READING AND CLEAR READING

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 245.4 W/M**2	0.650	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 5 AT LATITUDE 373808 LONGITUDE -1190151 ELEVATION 3133.3 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
TOP OF CHAIR THREE

SITE DESCRIPTION:
OPEN AREA ON STEEP SLOPE

RECORD # 1

DATE: 4/13/77 TIME: 15:41

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

SPARSE CLOUDS NC SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	999.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.1 mV 212.2 W/M**2	0.300	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 6 AT LATITUDE 373817 LONGITUDE -1190156 ELEVATION 3048.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON THE FACE OF CHAIR THREE

SITE DESCRIPTION:
OPEN AREA ON SLOPE

RECORD # 1

DATE: 4/13/77 TIME: 15:55

RECORDER(S):
DANNY MARKS
JIM BREW

SITE COMMENTS:

SPARSE CLOUDS, NO SNOW
PYRG. READING AVERAGED FOR CLOUD AND CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	999.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.2 mV 219.6 W/M**2	0.400	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

274

SITE # 7 AT LATITUDE 373741 LONGITUDE -1190150 ELEVATION 3328.4 M
TOTAL RECORDS THIS SITE: 2

LOCATION DESCRIPTION:
TOP OF MAMMOTH MOUNTAIN ABOVE DAVES RUN

SITE DESCRIPTION:
OPEN AREA, NO OBSTRUCTIONS

RECORD # 1

DATE: 4/14/77 TIME: 11: 4

RECORDER(S):
DANNY MARKS
RALPH MILLIFF

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	999.	272.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.0 mV 188.2 W/M**2	0.000	999.0 W/M**2

RECORD # 2

DATE: 4/14/77 TIME: 11: 7

RECORDER(S):
JIM FREW
TARA HARDOIN
MIKE GROVES

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	999.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	0.000	348.8 W/M**2

'999.0' INDICATES MISSING DATA.

275

SITE # 8 AT LATITUDE 373746 LONGITUDE -1190134 ELEVATION 3182.1 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
TOP OF CHAIR NINE

SITE DESCRIPTION:
SITE OF ISCO RECORDER

RECORD # 1

DATE: 4/14/77 TIME: 12:14

RECORDER(S):
DANNY MARKS
RALPH MILLIFF

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
282.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 234.3 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

276

SITE # 9 AT LATITUDE 373835 LONGITUDE -1190217 ELEVATION 2901.7 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
BEHIND CHAIR ONE

SITE DESCRIPTION:
IN SPARSE TREE COVER

RECORD # 1

DATE: 4/14/77 TIME: 13:20

RECORDER(S):
DANNY MARKS
RALPH MILLIFF

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	276.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 263.8 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

277

SITE # 10 AT LATITUDE 373835 LONGITUDE -1190159 ELEVATION 2926.1 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
TOP OF BROADWAY

SITE DESCRIPTION:
OPEN AREA IN GULLY

RECORD # 1

DATE: 4/13/77 TIME: 12:33

RECORDER(S):
TARA HARDOIN
RALPH MILLIFF

SITE COMMENTS:

CLOUDY AND SNOWING LIGHTLY
BAD MEASUREMENTS OF WET BULB DEPRESSION

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
275.	999.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.750
		286.1 W/M**2

'999.0' INDICATES MISSING DATA.

278
SITE # 11 AT LATITUDE 373845 LONGITUDE -1190157 ELEVATION 2852.9 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
HALFWAY DOWN BROADWAY

SITE DESCRIPTION:
OPEN AREA

RECORD # 1

DATE: 4/13/77 TIME: 13:23

RECORDER(S):
TARA HARDOIN
RALPH MILLIFF

SITE COMMENTS:

CLOUDY, NO SNOW
BAD MEASUREMENTS OF WET BULB DEPRESSION

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	999.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	0.650	55.8 W/M**2

'999.0' INDICATES MISSING DATA.

279
SITE # 12 AT LATITUDE 373838 LONGITUDE -1190146 ELEVATION 2920.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
TOP OF CHAIR TWO

SITE DESCRIPTION:
CLEARING IN THE TREES

RECORD # 1

DATE: 4/13/77 TIME: 15:43

RECORDER(S):
TARA HARDOIN
RALPH MILLIFF

SITE COMMENTS:

CLEARING WITH PATCHY CLOUDS
BAD MEASUREMENTS OF WET BULB DEPRESSION

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	999.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	41.9 W/M**2

'999.0' INDICATES MISSING DATA.

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280

SITE # 13 AT LATITUDE 373832 LONGITUDE -1190142 ELEVATION 2938.3 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
AT HALFWAY HUT

SITE DESCRIPTION:
OPEN AREA

RECORD # 1

DATE: 4/14/77 TIME: 12:50

RECORDER(S) :
JIM FREW
TARA HARDOIN

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
281.	277.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	565.1 W/M**2
	0.000	

'999.0' INDICATES MISSING DATA.

281

SITE # 14 AT LATITUDE 373903 LONGITUDE -1190225 ELEVATION 2731.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ABOVE MAMMOTH LODGE

SITE DESCRIPTION:
IN FOREST

RECORD # 1

DATE: 4/14/77 TIME: 15:47

RECORDER(S):
JIM FREW
TARA HARDOIN

SITE COMMENTS:

CLEAR, LIGHT CIRRUS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
282.	278.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	104.7 W/M**2
	0.000	

'999.0' INDICATES MISSING DATA.

LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 5 WITH 6 MEMBERS

SURVEY AREA: COTTONWOOD PASS-MT. LANGLEY

MEMBERS: (TRIP LEADER FIRST)

JEFF DOZIER
KURT EGELHOFER
CHRIS CRABTREE
TODD HASKELL
JOHN SKERRY
WAYNE KLAUER

SURVEY DATES: 4/22-25/1977 LASTING 4 DAY(S)
6 SITES WERE SURVEYED WITH 20 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

GOOD WEATHER FOR WHOLE TRIP
SOME CLOUDY WEATHER

ORIGINAL PAGE IS
OF POOR QUALITY

SITE # 1 AT LATITUDE 362637 LONGITUDE -1181608 ELEVATION 2971.8 M
TOTAL RECORDS THIS SITE: 8

LOCATION DESCRIPTION:
BIG WHITNEY CAMP

SITE DESCRIPTION:
PARTIALLY OPEN AREA WITH SOME TREES

RECORD # 1

DATE: 4/23/77 TIME: 19: 0

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?
NO SURFACE TEMPERATURE MEASUREMENT, PATCHY SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
280.	277.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.2 mV 228.8 W/M**2	999.000	999.0 W/M**2

RECORD # 2

DATE: 4/23/77 TIME: 21: 0

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?
NO SURFACE TEMPERATURE MEASUREMENT, PATCHY SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	273.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.1 mV 210.3 W/M**2	999.000	999.0 W/M**2

RECORD # 3

DATE: 4/23/77 TIME: 23: 0

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?
NO SURFACE TEMPERATURE MEASUREMENT, PATCHY SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
271.	270.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.1 mV 204.8 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 4

DATE: 4/24/77 TIME: 7:30

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?

NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	268.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 250.9 W/M**2	999.000	999.0 W/M**2

RECORD # 5

DATE: 4/24/77 TIME: 10: 0

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?

NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	277.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 315.5 W/M**2	999.000	999.0 W/M**2

RECORD # 6

DATE: 4/24/77 TIME: 9:35

RECORDER(S):
KURT ENGELHOFER

SITE COMMENTS:

CLOUDY

NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
282.	275.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 295.2 W/M**2	0.700	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 7

DATE: 4/24/77 TIME: 10: 6

RECORDER(S):
KURT ENGELHOFER

SITE COMMENTS:

CLOUDY, NO PYRGEOMETER READING
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	276.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	0.750	999.0 W/M**2

RECORD # 8

DATE: 4/24/77 TIME: 10:30

RECORDER(S):
KURT ENGELHOFER

SITE COMMENTS:

CLOUDY, NO PYRGEOMETER READING
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
284.	277.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	0.700	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

ORIGINAL PAGE IS
OF POOR QUALITY

286

SITE # 2 AT LATITUDE 362808 LONGITUDE -1181615 ELEVATION 3352.8 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SIBERIAN PASS

SITE DESCRIPTION:
OPEN AREA

RECORD # 1

DATE: 4/24/77 TIME: 12:17

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

FULL CLOUD COVER
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
279.	275.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 295.2 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

287

SITE # 3 AT LATITUDE 362939 LONGITUDE -1181626 ELEVATION 3293.4 M
TOTAL RECORDS THIS SITE: 8

LOCATION DESCRIPTION:
JUNCTION CAMP

SITE DESCRIPTION:
THIN OPEN FOREST

RECORD # 1

DATE: 4/24/77 TIME: 13:30

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

THIN BUT TOTAL CLOUD COVER
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
277.	273.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 295.2 W/M**2	1.000	999.0 W/M**2

RECORD # 2

DATE: 4/25/77 TIME: 7:30

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLOUDY?
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	270.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 243.5 W/M**2	999.000	999.0 W/M**2

RECORD # 3

DATE: 4/25/77 TIME: 8: 0

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLOUDY?
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
277.	273.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 260.1 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 4

DATE: 4/25/77 TIME: 9:10

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
278.	273.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 254.6 W/M**2	999.000	999.0 W/M**2

RECORD # 5

DATE: 4/25/77 TIME: 11:42

RECORDER(S):
KURT ENGELHOFER

SITE COMMENTS:

CLEAR, NO PYRGEOMETER READING
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	277.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	1.000	999.0 W/M**2

RECORD # 6

DATE: 4/25/77 TIME: 18:18

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

THIN CLOUDS
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
277.	273.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 247.2 W/M**2	0.050	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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OF POOR QUALITY

RECORD # 7

DATE: 4/25/77 TIME: 20:10

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?

NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	271.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.2 mV 225.1 W/M**2	999.000	999.0 W/M**2

RECORD # 8

DATE: 4/26/77 TIME: 4:30

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?

NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
271.	270.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.2 mV 228.8 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

290

SITE # 4 AT LATITUDE 362945 LONGITUDE -1181507 ELEVATION 3438.1 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
WEST SIDE ARMY PASS TRAIL

SITE DESCRIPTION:
OPEN, ON SLOPE

RECORD # 1

DATE: 4/25/77 TIME: 9:36

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
279.	276.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 249.1 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

291

SITE # 5 AT LATITUDE 363009 LONGITUDE -1181445 ELEVATION 3913.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SHOULDER OF MT. LANGLEY

SITE DESCRIPTION:
OPEN AREA ON SLOPE

RECORD # 1

DATE: 4/25/77 TIME: 10:56

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
279.	275.	999.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
1.3 mV 238.0 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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OF POOR QUALITY

292

SITE # 6 AT LATITUDE 363124 LONGITUDE -1181420 ELEVATION 4275.4 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SUMMIT OF MT. LANGLEY

SITE DESCRIPTION:
OPEN UNOBSTRUCTED

RECORD # 1

DATE: 4/25/77 TIME: 13:45

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

CLEAR?
NO SURFACE TEMPERATURE MEASUREMENT

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	273.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.1 mV 203.0 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 6 WITH 5 MEMBERS

SURVEY AREA: KEARSARGE PASS

MEMBERS: (TRIP LEADER FIRST)

JEFF DOZIER

CARYN GOLD

ALAN GUNDERSON

MARK ROBERTS

GARETH THOMSON

SURVEY DATES: 4/30- 2/1977 LASTING 3 DAY(S)

4 SITES WERE SURVEYED WITH 10 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

PYRGEOMETER MEASUREMENTS

COLD WITH SOME SNOW

SITE # 1 AT LATITUDE 364617 LONGITUDE -1182401 ELEVATION 3237.0 M
TOTAL RECORDS THIS SITE: 7

LOCATION DESCRIPTION:

BASE CAMP, ABOVE EAST SHORE OF BULLFROG LAKE

SITE DESCRIPTION:

SPARSE VEGETATION, TREES

RECORD # 1

DATE: 4/30/77 TIME: 19: 0

RECORDER(S):

JEFF DOZIER

SITE COMMENTS:

LIGHT SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
270.	270.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 280.4 W/M**2	1.000	999.0 W/M**2

RECORD # 2

DATE: 4/30/77 TIME: 23: 0

RECORDER(S):

JEFF DOZIER

SITE COMMENTS:

CLEARING, BUT CLOUDY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
269.	269.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 287.8 W/M**2	0.500	999.0 W/M**2

RECORD # 3

DATE: 70/51/ 7 TIME: 10: 0

RECORDER(S):

JEFF DOZIER

SITE COMMENTS:

COLD AND WINDY, WITH LIGHT SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
269.	269.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 267.5 W/M**2	1.000	999.0 W/M**2

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OF POOR QUALITY

'999.0' INDICATES MISSING DATA.

RECORD # 4

DATE: 5/ 1/77 TIME: 12: 0

RECORDER(S) :
CARYN GOLD
MARK ROBERTS

SITE COMMENTS:

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
270.	270.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 239.9 W/M**2	999.000	999.0 W/M**2

RECORD # 5

DATE: 5/ 1/77 TIME: 13:20

RECORDER(S) :
CARYN GOLD
MARK ROBERTS

SITE COMMENTS:

CLOUDY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
271.	270.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 298.9 W/M**2	0.900	999.0 W/M**2

RECORD # 6

DATE: 5/ 1/77 TIME: 14:35

RECORDER(S) :
CARYN GOLD
MARK ROBERTS

SITE COMMENTS:

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
270.	270.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 260.1 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 7

DATE: 5/ 2/77 TIME: 7: 0

RECORDER(S) :

CARYN GOLD

MARK ROBERTS

SITE COMMENTS:

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
270.	267.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

C-4

SITE # 2 AT LATITUDE 364543 LONGITUDE -1182429 ELEVATION 2974.8 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SOUTH FACING SLOPE, ABOVE VIDETTE MEADOW

SITE DESCRIPTION:
SPARSE VEGETATION

RECORD # 1

DATE: 5/ 1/77 TIME: 12:30

RECORDER(S):
ALAN GUNDERSON
GARETH THOMSON

SITE COMMENTS:

INCREASING CLOUDINESS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
999.	999.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 W	999.0 W/M**2 0.250	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 3 AT LATITUDE 364624 LONGITUDE -1182432 ELEVATION 3316.2 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON MUIR TRAIL, ABOVE THE EAST END OF CHARLOTTE LAKE

SITE DESCRIPTION:
SPARSE VEGETATION

RECORD # 1

DATE: 5/ 1/77 TIME: 16: 7

RECORDER(S) :
ALAN GUNDERSON
GARETH THOMSON

SITE COMMENTS:

THIN CLOUD COVER

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
999.	999.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.350
		999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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244
SITE # 4 AT LATITUDE 364634 LONGITUDE -1182508 ELEVATION 3304.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON MUIF TRAIL, ABOVE EAST END OF CHARLOTTE LAKE

SITE DESCRIPTION:
SPARSE VEGETATION

RECORD # 1

DATE: 5/ 1/77 TIME: 18:38

RECORDER(S):
JEFF DOZIER

SITE COMMENTS:

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
269.	269.	999.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
1.4 mV 249.1 W/M**2	999.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 7 WITH 6 MEMBERS

SURVEY AREA: COTTONWOOD PASS

MEMBERS: (TRIP LEADER FIRST)

- DANNY MARKS
- JUMAR GENE MIYA
- BRAD STEWART
- JOHN MARKS
- MICHAEL GROVES
- RALPH MILLIFF

SURVEY DATES: 5/12-15/1977 LASTING 3 DAY(S)
17 SITES WERE SURVEYED WITH 25 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

SNOW FOR TWO DAYS, CLEAR WEATHER ON THE THIRD DAY
VARIABLE VEGETATION, FOREST AND MEADOW

301

SITE # 1 AT LATITUDE 362736 LONGITUDE -1180924 ELEVATION 2901.7 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ROAD TO HORSESHOE MEADOW, BEFORE JUNCTION

SITE DESCRIPTION:
WIDE TRAIL, MEDIUM DENSITY VEGETATION

RECORD # 1

DATE: 5/13/77 TIME: 10: 6

RECORDER(S) :
JOHN MARKS
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

SNOWING

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

302

SITE # 2 AT LATITUDE 362737 LONGITUDE -1180930 ELEVATION 2926.1 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
HORSESHOE MEADOW ROAD, AFTER THE JUNCTION

SITE DESCRIPTION:
SMALL CLEARING IN THE FOREST

RECORD # 1

DATE: 5/13/77 TIME: 10: 7

RECORDER(S) :
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

SNOWING

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
272.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 286.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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303

SITE # 3 AT LATITUDE 322707 LONGITUDE -1180926 ELEVATION 3011.4 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
WEST OF LAST CHANCE MEADOW

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/13/77 TIME: 10:35

RECORDER(S):
JOHN MARKS
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

PARTIAL CLEARING IN THE FOREST
MODERATE SNOWFALL

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 4 AT LATITUDE 362655 LONGITUDE -1180936 ELEVATION 3026.7 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
JUNCTION COTTONWOOD, AND TRAIL PASS TRAILS

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/13/77 TIME: 11: 0

RECORDER(S):
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

FULL CLOUD COVER, LIGHT SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	273.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 297.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

305

SITE # 5 AT LATITUDE 322659 LONGITUDE -1181048 ELEVATION 3035.8 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
COTTONWOOD PASS TRAIL, NORTH OF HORSESHOE MEADOW

SITE DESCRIPTION:
EDGE OF MEADOW/FOREST, LOW DENSITY VEGETATION

RECORD # 1

DATE: 5/13/77 TIME: 11:42

RECORDER(S) :
JOHN MARKS
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

MODERATE SNOWFALL

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	272.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

306

SITE # 6 AT LATITUDE 362613 LONGITUDE -1181005 ELEVATION 3017.5 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SOUTH SIDE OF HORSESHOE MEADOW, ABOVE ROAD

SITE DESCRIPTION:
MEADOW

RECORD # 1

DATE: 5/13/77 TIME: 12: 1

RECORDER(S) :
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

LIGHT SNOW, THIN CLOUDS
WET BULB THERMOMETER ON PSYCHROMETER IS BROKEN

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
275.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 291.5 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

367

SITE # 7 AT LATITUDE 362715 LONGITUDE -1181159 ELEVATION 3090.7 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
EAST SIDE OF COTTENWOOD PASS

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/13/77 TIME: 12:54

RECORDER(S):
JOHN MARKS
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

LIGHT SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV 999.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

308

SITE # 8 AT LATITUDE 362604 LONGITUDE -1181022 ELEVATION 3121.2 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
NORTH SIDE OF TRAIL PASS

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/13/77 TIME: 13:21

RECORDER(S):
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

LIGHT SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 286.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 9 AT LATITUDE 362538 LONGITUDE -1181034 ELEVATION 3200.4 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
TRAIL PASS SUMMIT

SITE DESCRIPTION:
CLEARING IN FOREST

RECORD # 1

DATE: 5/13/77 TIME: 13:56

RECORDER(S):
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

LIGHT SNOW, BROKEN CLOUD COVER

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
276.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 287.8 W/M**2	0.900	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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OF POOR QUALITY

SITE # 10 AT LATITUDE 362608 LONGITUDE -1181046 ELEVATION 3023.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SOUTH SIDE OF HORSESHOE MEADOW

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/13/77 TIME: 14:57

RECORDER(S):
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

CLEARING WITH SOME CLOUDS, AT THE EDGE OF THE FOREST

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
276.	273.	273.
PYRGOMETER READING	CLOUD COVER(%)	NET RAD
1.4 mV 267.5 W/M**2	0.250	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

311
SITE # 11 AT LATITUDE 372712 LONGITUDE -1181253 ELEVATION 3401.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
COTTONWOOD PASS SUMMIT

SITE DESCRIPTION:
OPEN SPACE

RECORD # 1

DATE: 5/13/77 TIME: 15: 5

RECORDER(S):
JOHN MARKS
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

PATCHY CLOUDS, VARIABLE CLOUD COVER

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	272.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
999.0 mV	999.0 W/M**2	0.750
		999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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OF POOR QUALITY

SITE # 12 AT LATITUDE 322642 LONGITUDE -1180930 ELEVATION 2987.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
HORSESHOE MEADOW CREEK

SITE DESCRIPTION:
MEADOW

RECORD # 1

DATE: 5/13/77 TIME: 15:35

RECORDER(S):
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

NO SNOW, PARTLY CLOUDY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
276.	273.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 232.5 W/M**2	0.300	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 13 AT LATITUDE 322711 LONGITUDE -1180939 ELEVATION 3011.4 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
END OF HORSESHOE MEADOW ROAD

SITE DESCRIPTION:
ON ROAD, OPEN SPACE SURROUNDED BY FOREST

RECORD # 1

DATE: 5/13/77 TIME: 16:20

RECORDER(S):
DANNY MARKS
JUMAR GENE MIYA
BRAD STEWART

SITE COMMENTS:

SOME CLOUDS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	274.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 239.9 W/M**2	0.300	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 14 AT LATITUDE 322744 LONGITUDE -1180906 ELEVATION 2989.5 M
TOTAL RECORDS THIS SITE: 9

LOCATION DESCRIPTION:
CAMP IN LAST CHANCE MEADOW

SITE DESCRIPTION:
AT FOOT OF HILL, LCW DENSITY VEGETATION

RECORD # 1

DATE: 5/13/77 TIME: 17:34

RECORDER(S):
MICHAEL GROVES

SITE COMMENTS:

RALPH MILLIFF
PARTLY CLOUDY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
0.	272.	272.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
273.0 mV ***** W/M**2	1.240	209.3 W/M**2

RECORD # 2

DATE: 5/13/77 TIME: 19:17

RECORDER(S):
RALPH MILLIFF

SITE COMMENTS:

INCREASING CLOUDINESS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
272.	271.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 249.1 W/M**2	0.800	999.0 W/M**2.

RECORD # 3

DATE: 5/13/77 TIME: 18:30

RECORDER(S):
MICHAEL GROVES

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
272.	272.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 230.6 W/M**2	0.000	999.0 W/M**2

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'999.0' INDICATES MISSING DATA.

RECORD # 4

DATE: 5/13/77 TIME: 22:47

RECORDER(S):

RALPH MILLIFF

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
268.	267.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.1 mV 204.8 W/M**2	0.000	999.0 W/M**2

RECORD # 5

DATE: 5/14/77 TIME: 0:56

RECORDER(S):

MICHAEL GROVES

RALPH MILLIFF

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
267.	266.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.1 mV 193.7 W/M**2	0.000	999.0 W/M**2

RECORD # 6

DATE: 5/14/77 TIME: 4:10

RECORDER(S):

MICHAEL GROVES

RALPH MILLIFF

SITE COMMENTS:

JUST BEFORE DAWN, CLEAR SKY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
266.	266.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.0 mV 188.2 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 7

DATE: 5/14/77 TIME: 7: 5

RECORDER(S):
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

CLEAR AND SUNNY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
276.	274.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 238.0 W/M**2	0.000	999.0 W/M**2

RECORD # 8

DATE: 5/14/77 TIME: 7:58

RECORDER(S):
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

BRIGHT SUNSHINE

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
282.	279.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.3 mV 241.7 W/M**2	0.000	999.0 W/M**2

RECORD # 9

DATE: 5/14/77 TIME: 8:30

RECORDER(S):
MICHAEL GROVES
RALPH MILLIFF

SITE COMMENTS:

BRIGHT SUNSHINE

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
280.	277.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 249.1 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 15 AT LATITUDE 322818 LONGITUDE -1180747 ELEVATION 3029.7 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
PASS BETWEEN LITTLE COTTONWOOD AND COTTONWOOD PASS

SITE DESCRIPTION:
SPARSE VEGETATION

RECORD # 1

DATE: 5/14/77 TIME: 10:51

RECORDER(S):
DANNY MARKS
RALPH MILLIFF

SITE COMMENTS:

CLEAR AND SUNNY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
280.	276.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 269.4 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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SITE # 16 AT LATITUDE 322857 LONGITUDE -1180555 ELEVATION 2590.8 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
HORSESHOE MEADOW ROAD, AT WALTER POINT

SITE DESCRIPTION:
CLIFF, NO VEGETATION

RECORD # 1

DATE: 5/14/77 TIME: 11:49

RECORDER(S):
DANNY MARKS
JOHN MARKS
RALPH MILLIFF

SITE COMMENTS:

BRIGHT SUN, SNOW COVER IS MELTING

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
281.	277.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 273.1 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

319

SITE # 17 AT LATITUDE 322934 LONGITUDE -1180558 ELEVATION 2170.2 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:

AT THE CAR, SECOND SWITCHBACK ON HORSESHOE MEADOW ROAD

SITE DESCRIPTION:

NO VEGETATION

RECORD # 1

DATE: 5/14/77 TIME: 12:57

RECORDER(S) :

MICHAEL GROVES
BRAD STEWART
JUMAR GENE MIYA

SITE COMMENTS:

CLEAR AND SUNNY

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
285.	275.	273.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 289.7 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 8 WITH 10 MEMBERS

SURVEY AREA: VALENTINE RESERVE

MEMBERS: (TRIP LEADER FIRST)

JEFF DOZIER
CARY HANSEN
KALLI KULL
KAREN JOHNSON
JUMAR GENE MIYA
JAY BAGGETT
ELLEN WITEBSKY
CHRIS MILLS
WAYNE TENNANT
ALAN STRAHLER

SURVEY DATES: 5/27- 1/1977 LASTING 6 DAY(S)
7 SITES WERE SURVEYED WITH 29 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

WARM WEATHER
RIPE SNOWPACK AT MAMMOTH CREST

SITE # 1 AT LATITUDE 373633 LONGITUDE -1190144 ELEVATION 2816.4 M
TOTAL RECORDS THIS SITE: 23

LOCATION DESCRIPTION:
VALENTINE RESERVE CABIN

SITE DESCRIPTION:
MEADOW TWENTY METERS SQUARE, IN FRONT OF THE CABIN

RECORD # 1

DATE: 5/29/77 TIME: 13: 0

RECORDER(S) :
ELLEN WITEBSKY

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
289.	286.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.9 mV 341.3 W/M**2	0.000	999.0 W/M**2

RECORD # 2

DATE: 5/29/77 TIME: 14:30

RECORDER(S) :
ELLEN WITEBSKY

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
287.	284.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.9 mV 354.2 W/M**2	0.000	999.0 W/M**2

RECORD # 3

DATE: 5/29/77 TIME: 15:25

RECORDER(S) :
ELLEN WITEBSKY

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
288.	282.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
2.0 mV 370.8 W/M**2	0.000	999.0 W/M**2

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322
RECORD # 4

DATE: 5/29/77 TIME: 22:55

RECORDER(S) :

ELLEN WITEBSKY
CHRIS MILLS
JAY BAGGETT
KAREN JOHNSON
WAYNE TENNANT

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
276.	276.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 286.0 W/M**2	0.000	999.0 W/M**2

RECORD # 5

DATE: 5/30/77 TIME: 0:30

RECORDER(S) :

JEFF DOZIER
ELLEN WITEBSKY

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
276.	275.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 278.6 W/M**2	0.000	999.0 W/M**2

RECORD # 6

DATE: 5/30/77 TIME: 2:10

RECORDER(S) :

CHRIS MILLS

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	274.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 276.8 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 7

DATE: 5/30/77 TIME: 3:40

RECORDER(S):
JAY BAGGETT

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
274.	272.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 273.1 W/M**2	0.000	999.0 W/M**2

RECORD # 8

DATE: 5/30/77 TIME: 5:15

RECORDER(S):
KAREN JOHNSON

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
275.	274.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 282.3 W/M**2	0.000	999.0 W/M**2

RECORD # 9

DATE: 5/30/77 TIME: 6:40

RECORDER(S):
WAYNE TENNANT

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	282.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 306.3 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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RECORD # 10

DATE: 5/30/77 TIME: 9: 7

RECORDER(S):
KALLI KULL

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
288.	285.	999.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
1.9 mV 343.2 W/M**2	0.000	999.0 W/M**2

RECORD # 11

DATE: 5/30/77 TIME: 21:30

RECORDER(S):
ELLEN WITEBSKY

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
285.	280.	999.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
1.8 mV 322.9 W/M**2	0.100	999.0 W/M**2

RECORD # 12

DATE: 5/30/77 TIME: 23:20

RECORDER(S):
CARY HANSEN

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
281.	279.	999.
PYRGEOMETEP READING	CLOUD COVER(%)	NET RAD
1.6 mV 304.4 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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RECORD # 13

DATE: 5/31/77 TIME: 0:55

RECORDER(S):
CHRIS MILLS

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
279.	275.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 302.6 W/M**2	0.000	999.0 W/M**2

RECORD # 14

DATE: 5/31/77 TIME: 2:20

RECORDER(S):
JAY BAGGETT

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
279.	276.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 297.0 W/M**2	0.000	999.0 W/M**2

RECORD # 15

DATE: 5/31/77 TIME: 3:47

RECORDER(S):
KAREN JOHNSON

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
277.	275.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 289.7 W/M**2	0.000	0.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 16

DATE: 5/31/77 TIME: 5:13

RECORDER(S):
WAYNE TENNANT

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
277.	276.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 295.2 W/M**2	0.000	999.0 W/M**2

RECORD # 17

DATE: 5/31/77 TIME: 6:38

RECORDER(S):
CHRIS MILLS

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
285.	281.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 321.0 W/M**2	0.000	999.0 W/M**2

RECORD # 18

DATE: 5/31/77 TIME: 7:50

RECORDER(S):
ELLEN WITEBSKY

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
288.	282.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
2.0 mV 369.0 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 19

DATE: 5/31/77 TIME: 9: 5

RECORDER(S):
CHRIS MILLS

SITE COMMENTS:

CLEAR AND WARM

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
291.	285.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
2.0 mV 365.3 W/M**2	0.000	999.0 W/M**2

RECORD # 20

DATE: 5/31/77 TIME: 10:40

RECORDER(S):
KAREN JOHNSON

SITE COMMENTS:

CLEAR CONDITIONS

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
292.	286.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
2.0 mV 369.0 W/M**2	0.000	999.0 W/M**2

RECORD # 21

DATE: 5/31/77 TIME: 12: 0

RECORDER(S):
JAY BAGGETT

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
293.	285.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
2.3 mV 415.1 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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RECORD # 22

DATE: 5/31/77 TIME: 13:30

RECORDER(S):

ELLEN WITEBSKY

SITE COMMENTS:

CLEAR AND WARM

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
293.	284.	999.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
2.0 mV 372.7 W/M**2	0.000	999.0 W/M**2

RECORD # 23

DATE: 5/31/77 TIME: 14:45

RECORDER(S):

CHRIS MILLS

SITE COMMENTS:

CLEAR AND WARM

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
294.	284.	999.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
2.1 mV 380.1 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 2 AT LATITUDE 373536 LONGITUDE -1190103 ELEVATION 2941.3 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
CRYSTAL LAKE DRAINAGE

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/30/77 TIME: 12:24

RECORDER(S):
ELLEN WITEBSKY
JUNAR GENE MIYA

SITE COMMENTS:

CLEAR AND WARM

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
289.	282.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 317.3 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

320
SITE # 3 AT LATITUDE 373536 LONGITUDE -1190124 ELEVATION 3151.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
JUNCTION HIGH TRAIL AND RIDGE

SITE DESCRIPTION:
SPARSE VEGETATION

RECORD # 1

DATE: 5/30/77 TIME: 13:29

RECORDER(S):
JUMAR GENE MIYA

SITE COMMENTS:

CLEAR

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
286.	279.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 278.6 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

ORIGINAL PAGE IS
OF POOR QUALITY

331

SITE # 4 AT LATITUDE 373510 LONGITUDE -1190120 ELEVATION 3224.8 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
AT RIDGE CREST

SITE DESCRIPTION:
NO VEGETATION

RECORD # 1

DATE: 5/30/77 TIME: 14:43

RECORDER(S):
WAYNE TENNANT

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
286.	279.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 263.8 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

332

SITE # 5 AT LATITUDE 373457 LONGITUDE -1190116 ELEVATION 3231.2 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SOUTH OF CRYSTAL LAKE, ON MAMMOTH CREST TRAIL

SITE DESCRIPTION:
NO VEGETATION, SNOW COVER

RECORD # 1

DATE: 5/30/77 TIME: 15:15

RECORDER(S):
WAYNE TENNANT
JUMAR GENE MIYA

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	277.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 267.5 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 6 AT LATITUDE 373534 LONGITUDE -1190135 ELEVATION 3182.1 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
MAMMOTH CREST TRAIL, WEST OF CRYSTAL LAKE

SITE DESCRIPTION:
PARTIAL SNOW COVER, NO VEGETATION

RECORD # 1

DATE: 5/30/77 TIME: 16: 9

RECORDER(S) :
ELLEN WITEBSKY

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
288.	281.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 262.0 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 7 AT LATITUDE 373848 LONGITUDE -1185758 ELEVATION 2386.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SAFEWAY PARKING LOT, MAMMOTH VILLAGE

SITE DESCRIPTION:
BLACKTOP, NO VEGETATION

RECORD # 1

DATE: 5/30/77 TIME: 17:29

RECORDER(S):
WAYNE TENNANT

SITE COMMENTS:

CLEAR SKY

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
289.	282.	999.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.6 mV 298.9 W/M**2	0.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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LONG-WAVE RADIATION DATA

DATA TABLES FOR TRIP # 9 WITH 2 MEMBERS

SURVEY AREA: DOGGETT CREEK

MEMBERS: (TRIP LEADER FIRST)
DANNY MARKS
JIM FREW

SURVEY DATES: 5/10-12/1977 LASTING 2 DAY(S)
9 SITES WERE SURVEYED WITH 13 RECORDS

TIME ZONE WAS PST

TRIP COMMENTS:

OVERCAST WITH RAIN AND SNOW
LOWER ELEVATIONS THAN SIERRA STUDY AREA

30

SITE # 1 AT LATITUDE 414952 LONGITUDE -1223933 ELEVATION 579.1 M
TOTAL RECORDS THIS SITE: 5

LOCATION DESCRIPTION:
TREE OF HEAVEN PARK

SITE DESCRIPTION:
FLAT GROUND WITH NC EXPOSURE

RECORD # 1

DATE: 5/10/77 TIME: 5:47

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

PARTLY CLOUDY
JUST AFTER A RAINSTORM

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
281.	278.	279.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.5 mV 278.6 W/M**2	0.500	999.0 W/M**2

RECORD # 2

DATE: 5/10/77 TIME: 20:50

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLOUD COVER, CHANCE OF RAIN

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
282.	279.	282.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.8 mV 322.9 W/M**2	1.000	999.0 W/M**2

RECORD # 3

DATE: 5/10/77 TIME: 22:50

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLOUD COVER, MIGHT RAIN

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
281.	279.	280.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 317.3 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

RECORD # 4

DATE: 5/11/77 TIME: 1:34

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

CLOUD COVER

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
280.	278.	280.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 315.5 W/M**2	1.000	999.0 W/M**2

RECORD # 5

DATE: 5/11/77 TIME: 6:31

RECORDER(S):
DANNY MARKS

SITE COMMENTS:

RAINING

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
281.	281.	280.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 315.5 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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SITE # 2 AT LATITUDE 415008 LONGITUDE -1225054 ELEVATION 530.4 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON ROAD, SOUTH OF OAK KNOLL RANGER STATION

SITE DESCRIPTION:
FLAT TOPOGRAPHY WITH NC EXPOSURE

RECORD # 1

DATE: 5/10/77 TIME: 9: 7

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

HIGH THICK CLOUD COVER
CHANCE OF RAIN

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
284.	280.	290.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.8 mV 330.3 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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SITE # 3 AT LATITUDE 415108 LONGITUDE -1225157 ELEVATION 731.5 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
AT THE HEAD OF CEDAR COVE

SITE DESCRIPTION:
LOW DENSITY FOREST

RECORD # 1

DATE: 5/10/77 TIME: 10:30

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

HIGH CLOUDS WITH LIGHT RAIN

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
283.	280.	290.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
1.9 mV 345.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 4 AT LATITUDE 415258 LONGITUDE -1225201 ELEVATION 1146.0 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON ROAD BETWEEN SALT LICK GULCH AND ROUND MOUNTAIN

SITE DESCRIPTION:
DIRT ROAD THROUGH FOREST

RECORD # 1

DATE: 5/10/77 TIME: 12: 1

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

CLOUDY, LIGHT RAIN

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
283.	280.	290.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.9 mV 345.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 5 AT LATITUDE 415336 LONGITUDE -1225207 ELEVATION 1243.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
HEAD OF EAST FORK OF DOGGETT CREEK

SITE DESCRIPTION:
DIRT ROAD THROUGH FOREST

RECORD # 1

DATE: 5/10/77 TIME: 12:26

RECORDER(S) :
DANNY MARKS
JIM FREW

SITE COMMENTS:

CLOUDY, LIGHT RAIN

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
279.	279.	291.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.4 mV 260.1 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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SITE # 6 AT LATITUDE 415355 LONGITUDE -1225256 ELEVATION 1353.3 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON ROAD BETWEEN DUTCH CREEK AND DOGGETT CREEK

SITE DESCRIPTION:
FOREST COVERED ROAD

RECORD # 1

DATE: 5/10/77 TIME: 13: 8

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

CLOUD COVER WITH SOME RAIN

DRY AIR TEMP(K)	WET AIR TEMP(K)	SURFACE TEMP(K)
282.	278.	285.
PYRGEOMETER READING	CLOUD COVER(%)	NET RAD
1.8 mV 333.9 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

243
SITE # 7 AT LATITUDE 415440 LONGITUDE -1225450 ELEVATION 1694.7 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
ON ROAD BETWEEN THE MIDDLE FORKS OF DOGGETT CREEK

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/10/77 TIME: 13:54

RECORDER(S) :
DANNY MARKS
JIM FREW

SITE COMMENTS:

SNOWING

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
275.	275.	275.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 310.0 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

8

SITE # 8 AT LATITUDE 415418 LONGITUDE -1225532 ELEVATION 1853.2 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:

NORTH SIDE OF ROAD BETWEEN FORKS OF DOGETT CREEK NEAR DEER CAMP

SITE DESCRIPTION:

ROCK CUTCROPPING

RECORD # 1

DATE: 5/10/77 TIME: 14:37

RECORDER(S):

DANNY MARKS

JIM FREW

SITE COMMENTS:

CLOUDY WITH LIGHT SNOW

DRY AIR TEMP (K)

273.

WET AIR TEMP (K)

273.

SURFACE TEMP (K)

276.

PYRGEOMETER READING

1.5 BV

284.1 W/M**2

CLOUD COVER (%)

1.000

NET RAD

999.0 W/M**2

'999.0' INDICATES MISSING DATA.

SITE # 9 AT LATITUDE 415412 LONGITUDE -1225520 ELEVATION 1755.6 M
TOTAL RECORDS THIS SITE: 1

LOCATION DESCRIPTION:
SOUTH SIDE OF ROAD BETWEEN FORKS OF DOGGETT CREEK NEAR DEER CAMP

SITE DESCRIPTION:
FOREST

RECORD # 1

DATE: 5/10/77 TIME: 15: 0

RECORDER(S):
DANNY MARKS
JIM FREW

SITE COMMENTS:

CLOUD COVER, LIGHT SNOW

DRY AIR TEMP (K)	WET AIR TEMP (K)	SURFACE TEMP (K)
273.	274.	277.
PYRGEOMETER READING	CLOUD COVER (%)	NET RAD
1.7 mV 306.3 W/M**2	1.000	999.0 W/M**2

'999.0' INDICATES MISSING DATA.

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Appendix 4

**Snow-Soil Temperature and Moisture Data
and Site Installation Notes**

Sites of thermistors and soil moisture blocks are described, and 1977-78 snow season data are listed.

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Thermistor and Soil Moisture Block Installation Notes

Bishop Pass Aerial Marker Snow Course 28A

Soil Moist. Blk. #	Thermistor #	Depth (m)
6	6	0.65
5	5	0.40
2	-	0.15
4	4	0.10
3	-	0.07
1	-	0.05
	3	0.00
	2	-0.65
	1	-1.25

Comments: Sample depth restricted due to frost. Surface organic mat present to about 0.05 m. Little horizontal textural differentiation. Few aggregates.

Texture analysis:

35% > 2.00 mm
24% > .60 mm
19% > .20 mm
18% > .06 mm
others 4% < .06 mm

Mammoth Mountain Gondola Shack #2

Soil Moist. Blk. #	Thermistor #	Depth (m)
6	6	0.70
3		0.40
5	5	0.30
2		0.25
4	4	0.10
	3	0.00
	2	-0.20
	1	-0.50

Comments: No soil samples taken: soil mineralogical composition unrepresentative; similar texture. Only six thermistors installed. Block #4 nonfunctional.

Valentine Reserve - Mammoth Lakes

Soil Moist. Blk. #	Thermistor #	Depth (m)
6	7	1.00
3		0.80
5	1	0.50
2		0.40
4	5	0.10
	3	0.00
	2	-0.20
	6	-0.50

Comments: Block #1 and thermistor #4 nonoperational. Horizons somewhat developed; surface forest litter and organic mat. Podzolic A and B horizons. Dense forest. Well developed aggregates.

Texture Analysis:

5% > 2.00 mm
 28% > .60 mm
 28% > .20 mm
 27% > .06 mm
 3% > .05 mm
 4% > .04 mm
 5% < .04 mm

Cottonwood Pass Aerial Marker

Soil Moist. Blk. #	Thermistor #	Depth (m)
6	7	1.00
3		0.60
5	6	0.50
2		0.30
4	5	0.10
1		0.05
	4	0.00
	3	-0.10
	2	-0.70
	1	-1.30

Comments: Little textural or mineralogical differentiation.
 No vegetation. No aggregates.

Textural Analysis:

29% > 2.00 mm
 37% > .60 mm
 17% > .20 mm
 12% > .06 mm
 2% > .05 mm
 3% < .05 mm

Bullfrog Lake Snow Course

Soil Moist. Blk. #	Thermistor #	Depth (m)
1	1	1.00
5	5	0.50
3		0.30
4,2	4	0.10
6		0.05
	6	0.00
	7	-0.10
	3	-0.50
	2	-1.00

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Comments: sparse forest cover. Some development of horizons. Tree root zone near sample site. Horizons contrasting in texture only. Sample lost.

Vidette Meadow Snow Course

Soil Moist. Blk. #	Thermistor #	Depth (m)
6,3	6	0.80
5,2	5	0.40
4,1	4	0.10
	7	0.00
	3	-0.10
	2	-0.50
	1	-1.00

Comments: Surface organic mat to about 0.10 m. Moderate horizontal development. Sparse forest and grasses. Tree root zone near array.

Textural analysis:

1%	>	2.00	mm
14%	>	.60	mm
17%	>	.20	mm
56%	>	.06	mm
5%	>	.05	mm
4%	>	.04	mm
3%	<	.04	mm

SOIL-SNOW TEMPERATURE AND MOISTURE DATA
1977-78 SNOW SEASON

Bishop Pass Aerial Marker

date/time	depth (m)	temperature (C)	moisture content (%)

3/19/78 11:00 AM	0.65	0.2	90
	0.40	0.0	85
	0.15	NA	28
	0.10	NA	0
	0.07	NA	90
	0.05	NA	88
	0.00	-0.4	
	-0.65	-1.4	
	-1.25	-2.9	

4/29/78 4:00 PM	0.65	-0.4	83
	0.40	-0.2	88
	0.15	NA	NA
	0.10	NA	NA
	0.07	NA	93
	0.05	NA	91
	0.00	-0.2	
	-0.65	-0.4	
	-1.25	-1.0	

4/29/78 5:25 PM	0.65	0.1	91
	0.40	-0.1	86
	0.15	NA	NA
	0.10	NA	NA
	0.07	NA	92
	0.05	NA	91
	0.00	-0.2	
	-0.65	-0.4	
	-1.25	-1.1	

4/30/78 5:42 AM	0.65	0.1	90
	0.40	-0.1	85
	0.15	NA	NA
	0.10	NA	NA
	0.07	NA	92
	0.05	NA	91
	0.00	-0.2	
	-0.65	-0.4	
	-1.25	-1.0	

4/30/78 6:52 AM	0.65	0.2	90
	0.40	0.0	88
	0.15	NA	NA
	0.10	NA	NA
	0.07	NA	92
	0.05	NA	92
	0.00	0.0	
	-0.65	-0.3	
	-1.25	-0.9	

Mammoth Mountain Gondola Shack #2

date/time	depth(m)	temperature(C)	moisture content(%)

12/30/77 2:30 PM	0.70	1.3	92
	0.40	NA	67
	0.30	0.4	88
	0.25	NA	54
	0.10	-0.1	88
	0.00	-0.7	
	-0.20	-0.9	
	-0.50	-1.6	

1/3/78 3:30 PM	0.70	1.6	46
	0.40	NA	85
	0.30	0.4	87
	0.25	NA	90
	0.10	-0.1	57
	0.00	-0.7	
	-0.20	-0.9	
	-0.50	-1.6	

Valentine Reserve, Mammoth Lakes

date/time	depth(m)	temperature(C)	moisture content(%)

12/30/77 2:30 PM	1.00	6.2	90
	0.80	NA	71
	0.50	4.0	89
	0.40	NA	60
	0.10	1.4	88
	0.00	0.4	
	-0.20	0.1	
	-0.50	-0.1	

3/30/78 4:00 PM	1.00	4.4	94
	0.80	NA	94
	0.50	2.6	93
	0.40	NA	92
	0.10	0.7	93
	0.00	0.2	
	-0.20	0.1	
	-0.50	0.1	

5/2/78 8:15 AM	1.00	3.6	92
	0.80	NA	80
	0.50	1.9	67
	0.40	NA	57
	0.10	0.5	32
	0.00	0.1	
	-0.20	0.1	
	-0.50	0.1	

Cottonwood Pass Aerial Marker

date/time	depth(m)	temperature(C)	moisture content(%)

	1.00	1.0	88
	0.60	NA	83
	0.50	0.3	77
1/27/78	0.30	NA	36
2:00 PM	0.10	NA	10
	0.05	NA	6
	0.00	-0.2	
	-0.10	-1.0	
	-0.70	-3.5	

	1.00	0.7	89
	0.60	NA	74
	0.50	0.2	67
4/2/78	0.30	NA	56
11:00 AM	0.10	NA	19
	0.05	NA	
	0.00	0.0	
	-0.10	0.0	
	-0.70	-0.3	

	1.00	0.8	87
	0.60	NA	68
	0.50	0.2	68
4/10/78	0.30	NA	36
3:45 PM	0.10	NA	38
	0.05	NA	20
	0.00	0.1	
	-0.10	0.0	
	-0.70	-0.4	

	1.00	0.7	88
	0.60	NA	70
	0.50	0.2	68
4/10/78	0.30	NA	38
6:45 PM	0.10	NA	27
	0.05	NA	19
	0.00	0.1	
	-0.10	0.0	
	-0.70	-0.4	

	1.00	0.7	88
	0.60	NA	70
	0.50	0.2	68
4/11/78	0.30	NA	37
12:45 AM	0.10	NA	42
	0.05	NA	19
	0.00	0.1	
	-0.10	0.0	
	-0.70	-0.3	

Cottonwood Pass Aerial Marker

date/time	depth (m)	temperature (C)	moisture content (%)

4/11/78 3:45 AM	1.00	0.7	87
	0.60	NA	70
	0.50	0.2	68
	0.30	NA	38
	0.10	NA	55
	0.05	NA	19
	0.00	0.1	
	-0.10	0.0	
	-0.70	-0.3	

4/11/78 6:45 AM	1.00	0.7	88
	0.60	NA	70
	0.50	0.2	68
	0.30	NA	38
	0.10	NA	62
	0.05	NA	19
	0.00	0.1	
	-0.10	0.0	
	-0.70	-0.3	

4/11/78 9:45 AM	1.00	0.7	87
	0.60	NA	70
	0.50	0.2	67
	0.30	NA	37
	0.10	NA	67
	0.05	NA	20
	0.00	0.0	
	-0.10	0.0	
	-0.70	-0.4	

4/11/78 12:45 PM	1.00	0.7	87
	0.60	NA	70
	0.50	0.2	67
	0.30	NA	38
	0.10	NA	69
	0.05	NA	19
	0.00	0.0	
	-0.10	0.0	
	-0.70	-0.4	

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Bullfrog Lake Snow Course

date/time	depth (m)	temperature (C)	moisture content (%)

	1.00	0.8	NA
	0.50	0.3	NA
	0.30	NA	NA
2/25/78	0.10	0.4	NA
9:15 AM	0.05	NA	NA
	0.00	-0.3	
	-0.10	-0.7	
	-0.50	NA	
	-1.00	-3.7	

Vidette Meadow Snow Course

date/time	depth (m)	temperature (C)	moisture content (%)

	0.80	1.5	90,92
	0.40	0.6	92,92
2/25/78	0.10	0.3	92,92
2:00 PM	0.00	0.1	
	-0.10	-1.4	
	-0.50	NA	
	-1.00	-4.9	
